

The Future of CU Boulder as a Public University: Embracing the Core Mission of Furthering the Public Good



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Report of the Academic Futures Committee

Submitted September 1, 2018; Released September 4, 2018



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Note:

The Academic Futures report presented here is a draft. Corrections and necessary additions will continue over the next month. The committee will continue to add references and links to documents it drew upon. Input from campus will be incorporated into the final version. The committee will also continue to correct any errors in the prose.

Table of Contents

Preface

Executive Summary

I. Introduction: What It Means to Be a Public University Today

II. Inclusive Excellence

III. The Five Projects

Project 1: A Common Student-Centered Approach to Learning

Project 2: Interdisciplinary Teaching, Research and Creative Works

Project 3: Internationalizing Our Campus

Project 4: Teaching and Technology, Distance and Online Education

Project 5: Sustaining, Supporting and Inspiring our Community

IV. Governance

V. Campus Success: Physical and Financial Resources

VI. Conclusion

VII. References

The Future of CU Boulder as a Public University: Embracing the Core Mission of Furthering the Public Good

Preface to the Draft: The Process Makes the Point

In August 2017, Provost Russell Moore and Senior Vice Chancellor and Chief Financial Officer Kelly Fox launched a strikingly new effort: “Rethinking the University: The Futures of Learning and Discovery,” what came to be known as “Academic Futures” (AF). The result was a year-long conversation that involved approximately 150 meetings and discussions, that brought in 158 position papers from the CU Boulder community and that saw thousands of comments listed on the Academic Futures website.

More like a small town urban planning process than a typical academic task force, the Academic Futures process involved an impressive number of faculty, staff and students. It offered department and unit level discussions, ran facilitated and thematic conversations and featured open town halls. No topic was off the table. No voice was ignored.

As more than one participant, including the provost, noted: the process itself already made Academic Futures a success because it enabled us to gather as an entire campus to imagine, to discuss and then begin to create our collective future. While the Academic Futures Committee believes it has offered strong recommendations as we move forward with our acts of teaching and learning, discovery and creation, it too wants to salute a process—admittedly at times an improvisation—that brought us together to ponder our core mission as a public institution of higher education.

That process was governed by some principles. Inclusive excellence informed our day-to-day work, it is a value the report embraces, and it is a goal for which our recommendations reach. Open communication and conversation marked every phase of our effort, as we engaged every mode of communication we could access—CU Boulder Today, our corps of listeners, open meetings and more. We sought to listen to all of you and to bring back to you what we heard, to make sure we were hearing and understanding correctly.

We also understood that our charge was to elicit from the campus community a set of goals to pursue that will move us forward on the chancellor’s strategic imperatives—Lead, Innovate, Impact. This was not a strategic planning exercise, nor was it a discussion of the nuts-and-bolts actions that must be taken to accomplish some task. We sought to identify large projects that will need all of our efforts to accomplish.

As promised, we are issuing our report as we start a new academic year. The theme we have chosen is “The Future of CU Boulder as a Public University: Embracing the Core Mission of Furthering the Public Good.” We rededicate our work to creating knowledge for and with the public, to engaging with problems that affect the publics we serve and to enabling our students as citizens to remake our democracy by equipping them with skills of critical reasoning and analysis, and a broad sense of civic obligation to the state, the nation, and the world.

As you turn to the report that follows, you will first find an executive summary of our projects and their key recommendations. We frame our conversation with our commitment to furthering the public and common good. We then discuss in detail the five projects that arose most forcefully from the work of the past year:

- A Common Student-Centered Approach to Learning
- Interdisciplinary Teaching, Research and Creative Work
- Internationalizing the Campus
- Teaching and Technology, Online and Distance Learning
- Sustaining, Supporting, and Inspiring our Community

None of these topics will come as a surprise. Many on campus have done good work in all of these areas. We have had earlier task forces and committees tackle these themes.

What is different about this process and thus this report?

First, because this was a collective, campus-wide effort, these recommendations come with a mandate. We have, for example, long talked about creating CU Boulder as a global campus. We now have charged ourselves with acting upon those fine ideas.

Second, we have sought to find a way to approach these issues—relevant to any university—in ways that are specific to CU Boulder and its mission as a public research university.

Third, we have offered some concrete first steps, actions we can take now or in the near future that we are convinced can transform the way we do our work in learning and discovery.

In closing, we note that this process was addressed to our shared academic futures. Our recommendations are thus addressed to academic issues for the most part. We feel that the provost must take responsibility for responding to these recommendations, and he must be given the authority to act upon those he and campus leadership accept, drawing upon the support of all administrative units and our community at large.



We offer this report in the spirit of the entire Academic Futures process. We now open a month-long period of public comment, asking our campus to ‘ground truth’ what we have heard and what we are presenting. We encourage everyone to read the report thoroughly and then tell us what you think. Throughout the month of September, we will be holding Town Halls across campus so that we can answer questions about the Report and the process. In addition, through the Academic Futures website (<https://www.colorado.edu/academicfutures>), you can submit comments and ask questions. As with the entire Academic Futures process, we will post comments and questions on the website.

Executive Summary

I. Introduction: What It Means to Be a Public University Today

In this report, the Academic Futures Committee explores why and how the University of Colorado's flagship campus should meet that leadership responsibility by renewing its commitment to the democratic and civic purposes of public higher education. By highlighting "the public" in public higher education at CU Boulder, we underscore not only that CU Boulder is funded in part by the state and governed by the state, but also that CU Boulder should embrace a core mission of furthering the public good. Public good, in the context of a top-tier comprehensive university, includes research, teaching, and service by which:

- We create knowledge for and with the public
- We engage with problems that affect the public
- We enable each generation of citizens to remake our democracy by equipping them with skills of critical reasoning and analysis, and a broad sense of civic obligation to the state, the nation, and the world.

For our students, keeping the public in public education means, in short, accessibility, diversity, and preparedness in all senses. To serve the public, it is crucial to keep education affordable and open. Our student body should reflect our society in terms of its social and cultural diversity, and the campus should be accessible to all. Here we highlight three crucial parts of a comprehensive, public research university for the future: the liberal arts, financial health, and public engagement.

The Liberal Arts should play a central role in CU Boulder's mission as a comprehensive university, fostering creative, critical, and independent thought that remains vital within an ever-changing world. To facilitate this role for liberal arts, the campus should:

- Explore the viability of a campus common curriculum that would feature the liberal arts
- Expand initiatives to enhance access to majors in the liberal arts
- Use the liberal arts as a "connective tissue" that can break down silos and encourage inter-/trans-/un- disciplinary conversations among students, faculty, and staff
- Invest in arts and humanities programs, as campus and public resources that enrich all lives
- Emphasize the liberal arts as part of CU Boulder's "brand" and explore how the university can represent that in its messaging.

Finances and Affordability. Embracing our role as a public university has budget implications. We feel strongly that CU Boulder and its advocates should continue to fight for public funding

and make the case for even greater investment of public funds. If we lose public higher education, our whole society loses as well.

- The university should not acquiesce in the shrinking or possible zeroing-out of public financing. It should fight for funding from the state and make the case for why CU Boulder is an excellent investment of public funds.
- The university should adopt a set of principles for fundraising that match the demands of changing times. The future should entail fundraising from a position of strength, by sharing with contributors the fundamental and non-negotiable value of having some institutions whose worth is not measured in the marketplace, at the polls or in the voting booth.
- The university should consider the following goals for its fundraising and budget model: All students with financial need graduate debt-free; diverse undergraduate and graduate students are recruited, supported, and mentored to make CU Boulder an attractive destination as well as a pipeline for the professions and academia.

Public Scholarship and Engagement. The system of great public research universities in the United States, which includes CU Boulder, historically has engaged with the general public through groundbreaking scholarship in the basic and applied sciences, the humanities, law and the social sciences, and through cultural expression in the fine and performing arts. Scholarship that engages with the public often is labeled “outreach,” and although it is recognized as delivering vital benefits to the university and to the public, the system of rewards for scholarly achievement in many disciplines often does not place a high value on public scholarship. The measures of the value of scholarly inquiry and expression cannot and should not rest entirely on criteria of public relevance, but scholars from all disciplines should be encouraged and rewarded when they make efforts to reach beyond their academic comfort zones in order to facilitate public understanding and civic engagement. Through administrative efforts to focus attention on and reward public scholarship, the university can become a place that bridges academia with the outside world and enhances mutual understanding and trust. A robust commitment to public-facing scholarship is one important way that the university can have a central voice in what constitutes the public good.

II. Inclusive excellence

The Academic Futures Committee joins with the rest of the campus in affirming diversity and inclusive excellence as foundational values for the University of Colorado Boulder. The committee has acted upon that affirmation, first, in its process, which sought to include diverse groups of campus constituents in our conversations about how to improve upon our excellence in teaching and learning, discovery and creation; and second, in its recommendations to the campus where inclusive excellence is seen as part of all our work together, and not as a thing apart or separate. In making its recommendations, the committee celebrates the good work

done in making excellence inclusive by many groups on campus, including the Office of Diversity, Equity and Community Engagement (ODECE) and its Diversity, Inclusion and Academic Excellence Plan Authoring Committee, Foundations of Excellence and the Faculty of Color group. As part of the academic futures conversations on inclusive excellence, we recognize explicitly that the work of creating a diverse, equitable and inclusive campus is never done, that we are far from perfect in our attempts at doing so, and that we will strive continuously to do and be better as a community.

III. The Five Projects

The Academic Futures Committee recommends five areas of concentrated effort for consideration: 1) Student-Centered Learning, 2) Interdisciplinarity, 3) Internationalization, 4) Technology and Education/Online and Distance Education and 5) Sustaining, Supporting and Inspiring Our Community.

Project 1: A Common Student-Centered Approach to Learning

Big idea: Disrupting conventional ideas of teaching and learning by declaring ourselves a student-centered campus

Goal: Coordinated and collective efforts in undergraduate teaching and learning, including a common learning experience, a teaching and learning center and a unified approach to advising

Concrete first steps:

- Within one year, formulate and then implement a plan for a campus-wide common curriculum.
- The first-year experience should be a collective, campus-wide effort involving both academic and co-curricular offerings which must be coordinated between and across units. Funding for academic courses related to the first year experience should be handled by the provost's office so that, for example, departments are not penalized for offering small first year seminars.

Recommendation: Working with the deans and in collaboration with Foundations of Excellence and other campus initiatives, create a Campus-Wide Common Learning Experience, drawing upon, for example, Foundations of Excellence and the Unified Student Experience project, to define educational touch points throughout the undergraduate experience, including research opportunities and public service learning as part of every student's graduation plan. This Common Learning Experience should encourage student agency.

Recommendation: The schools and colleges should make available research experiences and/or internship and community engagement opportunities for undergraduates, and students should be strongly encouraged to take advantage of such offerings. This effort should include support and incentives for all parts of campus to design, develop and scale research and internship experiences for their students, with such experiences becoming a hallmark for each department.

Recommendation: Working with the deans and in coordination with Foundations of Excellence implementation, develop a coordinated and comprehensive approach to undergraduate and graduate student advising to ensure that all students are supported throughout their career at CU Boulder.

Recommendation: Emphasize the importance of teaching excellence through a comprehensive review of Annual Merit and Promotion and Tenure processes. Ensure that the time and energy involved in teaching efforts are rewarded appropriately.

Recommendation: Establish a Teaching and Learning Center, a centralized community space, dedicated to teaching and learning that transforms our teachers and students and is instrumental in solidifying innovative, research-based teaching practices as a cornerstone of the university.

Recommendation: The first-year experience should be a collective, campus-wide effort involving both academic and co-curricular offerings which must be coordinated between and across units. Funding for academic courses related to the first-year experience should be handled by the provost's office so that, for example, departments are not penalized for offering small first-year seminars.

Project 2: Interdisciplinary Teaching, Research and Creative Work

Big Idea: Affirm interdisciplinarity as a key value in our teaching, research and creative work

Goal: Expand our status as a dynamic center for interdisciplinary teaching, research and creative work by eliminating impediments to that work and by clearly rewarding these efforts

Concrete First Steps:

- Grant the tenured and tenure-track faculty control over every fourth course they teach in order to invest it in team-teaching, interdisciplinary programs or any other endeavor they wish to join.

- Create a Vice Chancellor for Interdisciplinary Teaching, Research and Creative Work and Dean of Interdisciplinary Faculty who, among things, will work to transform our evaluation of interdisciplinary efforts in personnel decisions and budgeting.

Recommendation: Dramatically increase campus support for interdisciplinary teaching, research, and creative work with a particular focus on problems and opportunities that address public needs and/or involve public engagement.

Recommendation: Expand our interdisciplinary and co-teaching educational offerings at both the undergraduate and graduate levels. As a top priority, we recommend that the campus adopts the rule that every fourth course belongs to a tenured or tenure track faculty member.

Recommendation: Develop the necessary administrative infrastructure to support interdisciplinary teaching, research, and creative work, including oversight, physical resources, incentives and evaluation structures, budget approaches, minimizing start-up costs and administrative barriers, and reviewing tenure and promotion criteria.

Recommendation: Review major interdisciplinary investments and activities on campus, with the aim of assessing whether the associated human resources and facilities are being mobilized as well as possible to serve the campus and the public.

Recommendation: Create a Vice Chancellor for Interdisciplinary Teaching, Research and Creative Work who will also serve as “Dean of the Institutes.” Make clear how this office works with the Research and Innovation Office to avoid duplication of efforts.

Project 3: Internationalizing the Campus

Big Idea: Act in the world to address the era of globalization

Goal: Coordinated efforts to provide essential support for our international students, to expand international opportunities for our U.S. students and to galvanize our international research and creative work, particularly as we seek to address challenges facing global society

Concrete First Step:

- Charge the proposed Vice Provost for Education with duties specific to accelerating campus-wide internationalization.

Recommendation: The provost should appoint a Vice Provost and Associate Vice Chancellor for Education, whose other duties are spelled out elsewhere in this report. That vice provost

should be assigned duties specific to developing a global campus, including but not limited to directing international educational efforts that span graduate and undergraduate education, and developing pathways that use technology and education to reach a global audience and support our international students.

Recommendation: The provost should incentivize international and interdisciplinary problem-based work that addresses some of the world's most pressing problem.

Project 4: Teaching and Technology, Online and Distance Education

Big Idea: Teaching excellence, independent of modality

Goal: Coordinated Use of State-of-the-Art Technology to Create a CU Boulder-Specific Strategy for a Spectrum of Education Modalities from Blended Learning to Online and Distance Education

Concrete First Step:

- Charge the schools and colleges and their faculties and deans with the accountability and academic oversight for all of their online and distance education courses, degrees and certificates offered, as well as for developing a path that leads to enhanced technology use in the classroom.
- Charge the deans of colleges and schools, in partnership with their units, to ensure that enough courses are available online to effectively and flexibly enable students to participate, both as residents and remotely.

Recommendation: Campus leadership should make clear its support of the vision of “teaching excellence, independent of modality” in order to create a flexible and comprehensive infrastructure that supports faculty, staff and students in using technology in our educational mission. Such an infrastructure should be informed by a clear understanding of the broad range of students we serve, both traditional and nontraditional. It should be supported by articulate policies that set out the duties and responsibilities for technology in education and develop clear, research-based expectations and defined metrics regarding academic outcomes, student success, impacts on enrollment and institutional reputation.

Recommendation: The provost should appoint a Vice Provost and Associate Vice Chancellor for Education who would have a specific mandate to provide strategic leadership for technology and teaching, online and distance learning; to pursue international educational efforts (as outlined elsewhere in this report); and to oversee a Teaching and Learning Center (as outlined elsewhere in this report). This vice provost would have responsibility for educational efforts that

span undergraduate and graduate education; these efforts should not duplicate or conflict with the work of the Graduate School or the Office of Undergraduate Education and should be coordinated with all the deans.

Recommendation: Create a support hub and the necessary physical space, preferably housed in the Center for Teaching and Learning, discussed elsewhere in this report, which will provide the training and support necessary to move forward with technology and teaching, online and distance education. Conversations with the campus should make clear what needs this hub would answer.

Recommendation: Charge the schools and colleges and their faculties and deans with accountability and academic oversight of online and distance courses, degrees and certificates offered, as well as for developing a path that leads to enhanced technology use in the classroom. In addition, schools and colleges, in partnership with their units, must ensure that enough courses are available online to effectively and flexibly enable students to participate, both as residents and remotely. These efforts, including the time and energy it takes to migrate courses online and helping units devise appropriate career mentoring/services, should be included as part of faculty and staff normal teaching loads. Faculty and staff must receive the appropriate support to ensure these efforts succeed.

Recommendation: The Dean of the Graduate School should convene a cross-campus committee to evaluate the current campus approach to the online professional graduate offerings within the entire spectrum of graduate education. The work should include addressing consistency across programs, developing concrete guidelines for all units in supporting these efforts, providing guidance so that units offer appropriate career advising and revisiting current budgeting and cost-sharing structures. The goal of this effort should include establishing policies that incentivize online professional degrees so that they are scalable, sustainable and aligned with accepted metrics of student success.

Project 5: Sustaining, Supporting and Inspiring Our Community

Big Idea: Our strength as a campus lies with our people

The foundation of the success of any of the above initiatives is the support of our campus community. Across the spectrum of faculty, staff and students, there arose remarkable and important ideas of how we do a better job connecting our community. There is commonality to many of the challenges we all face on an ongoing basis, as well as barriers unique to individual groups.

For All: Underlying many of the concerns raised as part of Academic Futures were a set of challenges our entire campus faces. Some are more readily within the control of the University, but all should be recognized as barriers our faculty, staff and students face.

Inclusive Culture: As a campus, we are committed to a culture of inclusive excellence, creativity and engagement. Our campus desires a culture of inclusivity that embraces differences and is a welcoming environment for diverse people, experiences and points of view. Diversity, inclusion and gender parity are not just phrases but embedded in our culture and our decision making.

Affordability: With housing costs skyrocketing in the Boulder-Denver area, everyone struggles to find affordable, convenient homes. The campus needs to work creatively to solve this problem, with possible solutions including blocks of faculty/staff/postdoc/grad student housing and improved transportation services. For our students, at all levels, the cost of tuition remains a growing concern, particularly with regards to its impacts on accessibility and equity.

Childcare/Eldercare: The campus must create an affordable child care and elder care program. We need to provide lactation spaces for nursing mothers across the campus. We need to discuss possibilities for work-hour flexibility for working parents.

A Unified Experience, Mentoring and Professional Development: Though the picture of what this looks like varies from students to postdocs to staff to faculty, across the board there is a sense that our community's experience at CU Boulder is highly varied and unequitable. Everyone has many avenues to navigate in order to access the information they need. Build on the Unified Student Experience project to create such support for everyone. As an extension, everyone on our campus should have access to and be recognized for both mentoring and the professional development opportunities that enrich their experience and move them forward on their path.

Common Spaces: At all levels of our community, we lack sufficient space for collaborating, connecting and sharing. We should make sure that all new buildings include community spaces. We should explore the possibility of creating a new University Club.

Breaking Down the Silos and Open Communication: Everyone on campus desires more connections—between students and mentors from the faculty and staff, between academic departments, between administrative units, between faculty and staff.

For Our Undergraduates: Academic Future's first project is focused on creating a student-centered campus and thus on student success. Almost everything in this report can be seen as building a better teaching and learning environment. Rather than repeat all the good ideas in other processes and other portions of this report, we note a few important collective efforts we must undertake for our undergraduates.

Teaching Excellence: Our faculty and staff are dedicated to providing our students with the best possible opportunities to learn. To support our students, we must make sure we are providing the faculty with the time and training to develop creative new approaches to teaching and learning. The proposed Center for Teaching and Learning could coordinate such efforts.

Impactful Educational Experiences: There is a clear desire to provide our students with a range of "high-touch," innovative educational opportunities that range from small classes in critical thinking and communication to online offerings

Advising Excellence for all Students: We must have a comprehensive and coordinated approach to advising that ensures that students are supported throughout their careers at CU Boulder.

The Whole Student: Academic Futures has, by definition, focused on the academic side of CU Boulder. The Academic Futures Committee recognizes that we must recognize our students as whole, complex, diverse human beings. The Academic Futures Committee applauds the work done by Student Affairs, by ODECE, by advisors and by many others to serve all of the needs of our students.

For Our Graduate Students and Post-Docs: Graduate Students and Post-Doctoral Fellows occupy unique positions on campus. They are simultaneously being taught or mentored by the faculty and serving the campus as teachers and researchers; they are both being developed as future members of the profession or for other career paths, and they are working for us now. We must recognize and support their development as full-fledged members of our academic community by providing a universally inclusive experience and working environment where resources are sufficient to support their success.

Financial Support: Increasing financial support for students and their research (including stipends, housing, child care, dedicated graduate student space, summer funding and research and writing support). Beyond increasing financial support, the university should restructure its funding of graduate students (e.g., teaching assistant (TA) support and fellowship funds) to ensure that the funding models reflect graduate

programs and their needs as they exist today and to guarantee minimum standards for space and funding for all graduate students.

Support Services and Mentoring for Beyond the Academy: The campus must provide the appropriate support and mentoring for graduate students who wish to shape the future professoriate, but this is no longer a sufficient description of our efforts in graduate education as we prepare students for careers outside academia. The university needs to promote and support interactions between graduate students, faculty and researchers beyond their home units, including community building opportunities, professional socialization/career readiness, mentoring resources and mental health and wellness support. We need a central hub for non-academic advising and placement.

For Our Staff: As we work to ensure our students' success and as we extend our excellence in research, scholarship and creative work, we need also to focus on staff success. We need to reaffirm the importance of our staff to the university's mission and support them. Our staff want to participate more fully in the work of academic departments as well as administrative units. Our staff are dedicated members of the university community who want to pursue careers on our campus. We need to make sure we provide the kinds of services and support they need:

Tuition Benefit: Perhaps the most often heard request from staff was an improvement in the tuition benefit. Fewer than 5 percent of our staff colleagues make use of this benefit. Improvements might include: making it easier to be accepted into a college so as to use the benefit; providing flexibility for taking classes during work hours; streamlining reciprocity with Front Range Community College and other institutions; and providing more online classes to provide "seats" for staff members.

Career Development: We should expand upon the good work already being done to provide career development programs and career mobility. People spoke in particular to the need for training for mid-level managers.

Service: Staff should be encouraged and rewarded for engaging in service at all levels of the campus and beyond, such as departmental service, Staff Council, broader campus engagement and community outreach.

Breaking Down Silos through Interdepartmental Efforts: Just as students and faculty want interdisciplinary opportunities and inter-unit connections, so do staff want to have ways to link so as to cross-pollinate ideas and produce innovative ideas

For Our Faculty: As Academic Futures articulates our collective campus mission and guiding values as an institution of learning and discovery, how do we ensure that faculty can fully

understand and succeed in their roles? The Academic Futures Committee recognizes the vital contributions of the various faculty groups on campus. As the tenure track faculty push forward the research, teaching and service mission of the campus, our research faculty make huge contributions to the scholarly work of the university and—as instructors/senior instructors/teaching professors, along with clinical faculty members and other groups—represent some of our strongest pedagogical efforts. The Academic Futures Committee affirms the centrality of instructor-rank faculty and research faculty—who, in conjunction with the tenure and tenure track faculty comprise the “regular faculty”—in the educational and research mission of the campus.

Recruitment and Retention: Inclusive excellence must guide our faculty hiring and development process. Resources must be available for the identification, recruitment, training, support and retention of a diverse faculty body. As stated elsewhere in this report, a Teaching and Learning Center should be created which will have the resources and expertise to, for example, enhance teaching as a scholarly activity and to promote teaching excellence is also encouraged. Regularly perform salary reviews (e.g., every two years) at the college or department level to assess salary inequalities that could impact all faculty. These reviews should be enforced at the campus level. There must be a clear plan to deal with inequalities, in consultation with the faculty member.

Promotion and Tenure Review: Consider updating review criteria to include some measure of “impact.” This approach could be better suited given the increasing role of multidisciplinary research. Impact includes not just high-impact journals and well-reviewed books, but also includes social and economic impact on communities, national level recognition, attention in conventional and social media, etc. In addition, develop a clear definition of what excellence in teaching means.

Research Faculty and Instructors: Recognize the significant contributions that instructors and research faculty make in the advancement of teaching on the CU Boulder campus, and revisit university policies and ideals in regard to the way in which instructors and research faculty are incorporated into the overall campus community. There needs to be a discussion about offering instructors the opportunity for additional professional development within their fields, if they so desire. In addition, improve the language of the contracts for instructors. They do not match our values as an institution that treats their employees with respect.

IV. Governance

Faculty Governance

The University of Colorado Boulder operates under shared governance in which the faculty works in conjunction with academic and non-academic administrators to guide the campus forward. However, with the growth of the administration, and particularly of non-academic administrative groups, many faculty members have come to feel that the faculty is no longer in control of the academic work of the campus. The current situation is marked by a number of challenges:

- Communication between the administration and faculty, as well as between faculty governance groups and the campus, needs improvement.
- Many faculty believe that governance has weakened in recent years.
- Many on the faculty feel that faculty governance bodies are ineffective, and they are thus unwilling to participate.

For most faculty members, governance issues arise at three levels: the department or division, the school or college and the campus. At each level, there is shared governance between the faculty as a whole that make up that community and one or more administrators, from chairs to the provost. Different faculty members are engaged to differing degrees at each of these levels; their voices need to be heard where appropriate and their efforts need to be recognized. Departments and divisions are responsible for their own bylaws and procedures.

Recommendation: Each department and division should review its bylaws thoroughly, no later than the unit's next program review, in order to make sure the governance structure reflects the culture of the unit and current college, campus and system policies. Attention must be paid to the appropriate rights and participation of all members of the department, including instructors, research faculty, staff, graduate students and undergraduate students.

Faculty governance varies dramatically from school to college.

Recommendation: Each of the deans should engage their faculty in designing the appropriate governance structure for their school or college. Every school or college should have a governance body recognized by the faculty as representing their interests, ideas and concerns.

Campus-wide governance

The provost currently must deal with a hodge-podge of decision-making groups not to mention individuals who report to the provost or seek access. The provost should consider a clearer model for gathering ideas and making decisions. A simpler and perhaps stronger model would establish the provost as, in essence, the president of the campus, with the Council of Deans serving as a sort of campus senate and the BFA as a campus house of representatives. A clear campus process would need to be established to determine which matters needed to be brought by the "executive branch" to the two "legislative branches."

Recommendation: The provost and the faculty should convene a task force to create a shared campus-level governance structure that involves the faculty in core decisions while allowing the administration the freedom to carry out those decisions. As a public research university devoted to instilling democratic ideals in our students, we should embody those ideals in our practices.

V. Campus Success: Physical and Financial Resources

The Academic Futures Committee notes that there are other processes in place that will move forward conversations on such subjects as budget, space and infrastructure. For example, the campus has announced a “Financial Futures” project. The Academic Futures Committee commends this effort, which promises to help align our resources with our mission, including the ideas embedded in this report. The Academic Futures process did not allow for the detailed conversations about budgeting that Financial Futures will undertake, but the committee does have some issues it believes should be considered in this new conversation:

- It may seem to go without saying, but we should always remember that the budget is a tool for accomplishing our mission as a public institution of higher education. We are not a business. All budget decisions should be measured by how they serve our core missions of teaching and discovery.
- The Academic Futures Committee urges the campus to rededicate itself to our mission as a public research university and that includes pursuing additional state financial support for higher education.
- There is a wide-spread conviction on campus that current budget models, at least as they are implemented at the local level, prevent us from doing many of the things we wish to do. For example, departments told to track student credit hours in order to gain budget are unlikely to assign faculty to small first-year seminars or allow them to team-teach. We must design a budget model that flexibly enables and supports the creative efforts of the campus.
- Resources—even resources on the margin—should not be allocated solely on the basis of student credit hour generation. We need to be able to consider how, for example, research and creative work serve our strategic imperatives of innovation and impact, and we need to think about how service, leadership and outreach promote our impact on humanity.
- The process for making major budget decisions—not the management of the budget day-by-day—must be transparent to the campus and the faculty’s role in making such decisions must be specified.

The Academic Futures Committee has a smaller number of more specific ideas to consider:

- The Academic Futures Committee believes that serious consideration should be given to budgeting all academic courses and programs devoted to the first-year experience

through the provost's office. Serving our first-year students should be a common cause with a common budget.

- The projects set forth by Academic Futures, as well as the other strategic efforts currently underway on campus, will require significant resources. We suggest that Financial Futures establish an investment pool, funded by all units on campus. This pool represents a commitment by the entire campus for our collective future.

The Academic Futures Committee also notes that a Strategic Facilities Visioning process is underway that will lead to our decadal master plan. The Academic Futures Committee is interested in this effort, which promises to help align our development of facilities with our mission, including the ideas included in this report. The Academic Futures process did not allow for the detailed conversations about budgeting that this visioning process will undertake, but the committee does have some issues it believes should be considered in this new conversation:

- The campus must create an affordable child care and elder care program. This does not necessarily entail a building on campus.
- There is a great desire for more communal space, including a University Club that could serve to build community.
- All new buildings should include appropriate communal spaces, including open space, cafes and outdoor seating.
- Housing issues for staff, graduate students and faculty must be addressed. This may well include the building of new housing.

The Academic Futures Committee heard in detail about the future of our analytical facilities. CU Boulder deeply invests in the development of analytical capabilities in laboratories within our institutes, the College of Arts and Sciences and the College of Engineering and Applied Science and elsewhere. As we look to the future, we recommend the more purposeful development of campus spaces and analytical facilities within “Campus Core Facilities” designed around thematic research and educational needs and experiences.

I. Introduction: What It Means to Be a Public University Today

The core of CU Boulder’s campus mission is as follows. “In Colorado statute, the university is defined as the ‘comprehensive graduate research university’... It is keenly aware of its responsibility for educating the next generation of citizens and leaders” (<https://www.colorado.edu/about/mission>). The Academic Futures Committee calls upon the University of Colorado’s flagship campus to affirm that responsibility by renewing its commitment to the democratic and civic purposes of public higher education. By highlighting “the public” in public higher education at CU Boulder, we underscore not only that CU Boulder is funded in part by the state and governed by the state, but also that CU Boulder should embrace a core mission of furthering the public good. Public good, in the context of a top-tier comprehensive university, includes research, teaching and service that: (1) create knowledge for the public; (2) engage with problems that affect the public; and (3) enable each generation of citizens to remake our democracy by equipping them with skills of critical reasoning and analysis and a broad sense of civic obligation to the state, the nation and the world. As a public research university, we pursue acts of discovery and creation that serve the public good, including the advancement of knowledge itself.

The Academic Futures visioning process has led us not only to reaffirm, but also to call on all of us to transform—publicly and explicitly—CU Boulder’s identity as a diverse and inclusive university where students, staff and faculty work for the good of society. We already have a strong identity as a community devoted to public service. Some 500,000 Coloradans in 52 counties have been served by more than 200 CU Boulder outreach programs involving more than 5000 of our students, faculty and staff. The first student-run campus environmental center was founded at CU Boulder on the nation’s first Earth Day in 1970; we have the first collegiate recycling program (1976), the nation’s first zero-waste major sports stadium (2008) and the first student-led renewable energy purchase (2000). We must build on that tradition. The university should position itself publicly as **the** university that prepares its students to work for the public good from various vantage points from aerospace to the arts, from classics to computer science, from ethics to entrepreneurship.

Background and Justification

As W.E.B. DuBois, Martha Nussbaum, Amy Gutmann, Derek Bok and many others have recognized, public universities are critical institutions within a democratic society. In the current moment in the United States, ideals of knowledge, truth and equality are under threat, with autocratic and anti-intellectual trends on the rise (see e.g., Pew Research poll of July 17, 2017). Similar challenges to democracy are underway in many other parts of the world. Against such a landscape, the university’s role in creating capable and engaged democratic citizens cannot be

understated. The university equips students with valuable life and career skills and dispositions, including ethics, rhetoric, critique and reflection; independent, creative and critical thinking; and problem-solving and communication.

Most importantly today, the university also provides and requires interaction with people from all walks of life, with ideas and values different from our own, and with life experiences well beyond our own sphere. With young people increasingly engaged with, and some would say isolated by, technology, the public university can provide an antidote. Focusing on face-to-face human relationships could be the most radical and productive thing we do. Our strategic imperatives—Lead. Innovate. Impact.—all need to happen in community with others. The university provides the space, literally and figuratively, for people to confront and to learn from one another.

Given today's challenges, let alone an uncertain future, what might it mean for CU Boulder to embrace a core mission of serving the public good? There is a tremendous amount that we already do well and that we should highlight and develop. Our faculty produces world-class scholarship and creative work in areas all across the campus, including the sciences, humanities, music, art, law and engineering. Looking to the future, we find inspiration in the ideas generated by faculty, staff and students from across the campus through the Academic Futures meetings and short papers. Some of our colleagues focus on creating space for faculty across disciplines to work together on the world's most pressing problems, others on engaging our students in research questions that deliver value to our society. An underlying theme is the importance of maintaining the independence of faculty and students to do this work free from inappropriate external pressures. The heart of a public research institution should be work that is independent of outside money and influence. Further, we should encourage research regardless of whether its value is immediate or tangible. Here, an overarching question is: Are we, with our research and creative work, serving public values, creating a space for public thought and thereby making the case for public institutions? As a public research university, we must be a source of common knowledge, defenders of commonly held facts and participants in the collective adjudication of theories and interpretations that occur within the various disciplines.

For our students, keeping the public in public education means, in short, accessibility, diversity and preparedness in all senses. To serve the public, it is crucial to keep education affordable and open. Our student body should reflect our society in terms of its social and cultural diversity, and the campus should be accessible to all. Our obligation to future students is to equip them with habits of mind and tools of inquiry that are much broader than market ready job skills. Some specific and compelling ideas we have heard along these lines include: creating debt-free pathways to graduation for all students; highlighting the importance of a liberal arts-based curriculum regardless of career path; bolstering community-engaged research and teaching

opportunities for students; and providing clear and strong support for diverse students, staff and faculty throughout their time at CU Boulder. These are goals we endorse.

Embracing our role as a public university has budget implications. We feel strongly that CU Boulder and its advocates should continue to fight for public funding and make the case for even greater investment of public funds. If we lose public higher education, our whole society loses as well. We recognize, however, that CU Boulder will also have to continue to pursue diverse sources of funding, including from foundations and individual donors. We therefore also remain committed to ensuring the independence and accuracy of scholarship regardless of funding sources. Academic Futures is a creative way to invest CU Boulder's public mission and public identity with new energy, purpose and commitment—the kind of bedrock foundation from which we can pursue new forms of research, teaching, scholarship, learning and creative work and even funding.

As the flagship university not only for the University of Colorado but for the State of Colorado, the University of Colorado Boulder has a particular obligation to ensure the health of public higher education across the board. Scarce resources will do more harm to other institutions, such as community colleges, than to CU Boulder. We must begin thinking about a future in which we have more formal and effective relationships with other institutions. Perhaps this means creating a larger ecosystem of higher education institutions across our state or perhaps it means looking at new models of engagement: for example, a partnership with Front Range Community College could create a more direct pipeline for students transferring to Boulder and could also provide temporary employment for graduate students as they face an increasingly difficult academic job market. Or perhaps CU Boulder degrees could be offered jointly with other institutions in the state, with Boulder using its online classes and other technologically enhanced courses to deliver a CU Boulder education across the state. In any event, if public education is to survive, it cannot survive in Boulder alone.

With our programs, curricula, services, research, creative work, scholarship, access, dialogue and intellectual engagement, we have the power to create democratic citizens in the best sense of those terms. First year programs and courses, academic learning communities, identity enhancing programs, student research opportunities, dialogue in the face of disagreement, all of these make a difference for our students and for the larger community. Here we highlight three crucial parts of a comprehensive, public research university for the future: the liberal arts, financial health and public engagement.

The Liberal Arts: The liberal arts should play a central role in CU Boulder's mission as a comprehensive university, which has a responsibility to educate the next generation of diverse citizens and leaders. The arts, humanities and the social and natural sciences foster creative, critical and independent thought that remains vital within an ever-changing world. The College

of Arts and Sciences' Strategic Planning Committee similarly affirmed the importance of critical thought, creativity and compassion (<https://www.colorado.edu/artsandsciences/about-us/strategic-planning>). While the liberal arts can provide scientific, ethical and historically informed solutions to some of our most pressing problems, there is likewise intrinsic value of extending the frontiers of knowledge irrespective of pecuniary or instrumental ends within the context of a public university. The expansion and sharing of knowledge is a fundamentally social/communal act that elevates all participants and is a good in itself. The university offers a uniquely inclusive space and place for this pursuit.

There are a number of steps we might take:

- Explore the viability of a campus common curriculum that would feature the liberal arts
- Expand initiatives to enhance access to majors in the liberal arts (especially arts and humanities) Use the liberal arts as a “connective tissue” that can break down silos and encourage inter-/trans-/un-disciplinary conversations among students, faculty and staff
- Invest in arts and humanities programs (e.g., the Center for Humanities and the Arts, humanities and arts “laboratories” such as the Race and Popular Culture (RAP) Lab, CU Art Museum) as campus and public resources that enrich all lives
- Emphasize the liberal arts as part of CU Boulder’s “brand” and explore how the university can represent that in its messaging. This should include conversations about recruiting students who wish to pursue a degree in the liberal arts, perhaps in conjunction with a second degree, a minor or a professional masters.

Other sections of this report explore some of these ideas in more detail. The key point is that the campus, through the provost and the Office of Academic Affairs, must affirm through concrete actions, such as those just listed, the importance of a liberal arts education for all of our students and for our public mission.

Finances and Affordability: Embracing the public mission in this public institution of higher education has financial and budget implications. We cannot address the specifics of budget issues, but support the following three ideas.

First, the university should not acquiesce in the shrinking or possible zeroing-out of public financing. It should fight for funding from the state and make the case for why CU Boulder—and higher education in general—is an excellent investment of public funds. It should not assume, in other words, that the recent past of low state support is, in fact, our future.

Second, the university should adopt a set of principles for pursuing grants and fundraising that match the demands of changing times. Donations, contracts and grants are part of the present and will be part of the future regardless of whether CU Boulder succeeds in securing more state

funding. The future should not entail abandoning public values and mission in response to pressing needs to raise funds. The future should entail seeking funds from a position of strength, by sharing with contributors the fundamental and non-negotiable value of having some institutions whose worth is not measured in the marketplace, at polls or in the voting booth. That might be something that appeals to a broad array of the public.

Third, the university should consider the following goals for its fundraising and budget model: all students with financial need graduate debt-free; and diverse undergraduate and graduate students are recruited, supported and mentored to make CU Boulder an attractive destination for these students as well as a pipeline for the professions and academia.

A great deal of work inside the state and across the nation has been done to outline the need for and benefits of public education.

The Colorado Commission on Higher Education (CCHE), the official body charged with the responsibility of examining the postsecondary needs of the state, laid out four goals for Colorado's system of higher education in its 2012 CCHE Master Plan: Colorado Competes: A Completion Agenda for Higher Education.¹

Strategic Goal #1- Increase Completion

Strategic Goal #2 - Erase Equity Gaps

Strategic Goal #3 - Improve Student Success

Strategic Goal #4 - Invest in Affordability and Innovation

The "Colorado Goal" seeks to establish 66 percent attainment of these goals by 2025. The overarching goal is to "increase the number of Coloradans aged 25 to 34 who hold a high-quality postsecondary credential—that is, a certificate or degree—to 66 percent by 2025." The CCHE document contains the statement: "Colorado simply cannot afford an undereducated citizenry and an underfunded higher education system." As we look to the future we need to ask if this initiative is enough: how active is the CU System (i.e., Regents, President, etc.) in supporting this? Does this align with CU needs and goals?

The National Conference of State Legislatures' (NCSL) Blue Ribbon Commission on Higher Education gives the following recommendations for the challenge of funding in Higher Ed:

Define clear state goals. Identify your state's strengths and weaknesses.
Know your state demographic trends for the next 10 to 30 years. Identify a place or structure to sustain the public agenda. Hold institutions accountable for their performance. Rethink funding. Rethink student aid.

¹ Colorado Department of Higher Education, higher.ed.colorado.gov/ccche/mission.html

Help reduce borrowing and debt. Recommit to access. Recommit to success. Embrace innovation. Encourage partnerships. Transform the 12th grade. Don't neglect adult learners. Focus on productivity.²

To make the case for state support, we believe CU Boulder should highlight more forcefully why it is an excellent investment of public funds by indicating not only how it accomplishes such educational goals but also how it contributes to the social and economic health of the state. The Colorado Department of Higher Education gives the following points:³

- Colorado's 28 public colleges, universities and community colleges are educating 213,956 students, over 190,000 of whom are Colorado residents. Higher education in Colorado supports 97,563 jobs, which contribute \$4.25 billion in wages and salaries and almost \$387 million in state and local taxes to the Colorado economy annually.
- The University of Colorado reports that more than 60 companies have resulted from the commercialization of faculty research. In FY2018 alone, CU Boulder generated 184 new inventions and 51 new license and option agreements, each of which is an all-time record for the university. Seven new startup companies were formed, and in total CU Boulder startups raised \$318M during FY2018. In the last 1-year period, CU Boulder has received over \$11M in licensing royalties, again an all-time record.
- Higher education in Colorado employs 57,675 workers, according to the Colorado Department of Labor as adjusted for this study. The combined impact of the 57,675 direct employees is an additional 39,888 indirect and induced jobs for a total of 97,563 jobs. If these jobs pay the average Colorado wage of \$43,524, they contribute \$4.25 billion in wages and salaries and almost \$387 million in state and local taxes to the Colorado economy annually.
- The public higher education sector is one of the largest employers in the state, bigger than Natural Resources/Mining, Heavy Construction, Computers/ Electronics, Telecommunications or Federal Government. It accounts for over half of all state government jobs.
- Economic development officials agree that a well-trained workforce plus the ability to provide specific industry-based training is the number one priority of companies seeking to relocate or expand.

² "Blue Ribbon Commission on Higher Education - Maintaining Higher Education Access and Affordability..." National Conference of State Legislatures, ncsl.org/research/education/blue-ribbon-commission-on-higher-education-overvi.aspx

³ "The Impact of Higher Education on the State of Colorado." Colleges & Universities—Colorado Department of Higher Education, higher.ed.colorado.gov.

- The existence of colleges and universities in a community impacts the economy in many ways that cannot be measured adequately. For example:
 - Higher education brings visitors to the state.
 - Faculty research frequently leads to new companies that return money to the university and create jobs in the community where they are established.
 - Colleges and universities collaborate with local businesses for their mutual benefit.
 - College educated adults are healthier, devote more time to volunteer activities and are more likely to vote.
- Without Colorado's institutions of higher education, many young people would not receive a post-high school education and would face a lifetime of constrained job opportunities and lower earnings. Others would receive their higher education in other states, draining money from the Colorado economy and lessening the probability that they would become a part of Colorado's labor force.

And one more argument for the social and economic returns of College education: ⁴

- College graduates find better jobs, earn more money and suffer less unemployment than high school graduates do. They also live more stable family lives, enjoy better health and live longer. They commit fewer crimes and participate more in civic life. With all this going for them, it is hardly surprising that college graduates are significantly more likely than high school graduates to say they are “very happy.”

Public Scholarship and Engagement: The system of great public research universities in the United States, which includes CU Boulder, historically has engaged with the general public through groundbreaking scholarship in the basic and applied sciences, the humanities, law and the social sciences and through cultural expression in the fine and performing arts. The university engages with the public through our students by helping them learn to become responsible and public-minded citizens and by helping them understand human flourishing as a public good and not just a matter of individual success. Encouraging students to care about the environment, human health and welfare, the legitimacy and necessity of democratic processes, and cross-cultural understanding and respect, are important ways of helping them to become good, responsible citizens today and to serve as stewards on behalf of future generations. Inspiring students to be conscious of their capacities and responsibilities to contribute to the public good is and ought to be one of the highest aspirations of a public university.

⁴ Hout, Michael. “Social and Economic Returns to College Education in the United States.” *Annual Review of Sociology*, vol. 38, no. 1, Nov. 2012, pp. 379–400., doi:10.1146/annurev.soc.012809.102503.

CU Boulder engages directly with the public in a variety of other ways besides the education of its students. Some examples include the Conference on World Affairs, which bridges scholarship and lay discussions of pressing issues of the day, in art, culture, politics, science, law, policy and so much more. CU Boulder's Shakespeare Festival, art exhibits and music concert series and the work of several university research centers and institutes, law clinics and numerous other civic engagement programs reflect CU Boulder's many deep commitments to making scholarly inquiry and expression a public-facing activity. These activities are a testament to a capacity at CU Boulder to engage fruitfully with the public in many diverse ways, and the university has great potential to do more.

Scholarship that engages with the public often is labeled “outreach,” and although it is recognized as delivering vital benefits to the university and to the public, the system of rewards for scholarly achievement in many disciplines often does not place a high value on public scholarship. Whereas some academic fields are designed to facilitate and reward work that serves and engages with the public—for example, agriculture, business, education, law, medicine and the performing arts—assessments of faculty performance in other fields may show little concern for audiences or publics beyond narrowly defined circles of academic peers. The measures of the value of scholarly inquiry and expression cannot and should not rest entirely on criteria of public relevance, but scholars from all disciplines should be encouraged and rewarded when they make efforts to reach beyond their academic comfort zones in order to facilitate public understanding and civic engagement. The performance standards for evaluating faculty success should not draw a circle around peer assessment to the exclusion of assessments of contributions to the public good, but the challenge for many disciplines is to determine what value to place on such efforts. An over-reliance on narrowly defined metrics to judge faculty success has the potential to deprive the public, and the university, of mutually beneficial and rewarding interaction. The catch-all category of “service,” used to evaluate faculty performance that does not qualify as “scholarship” or “teaching,” does a disservice to the public and the university by normalizing metrics that discourage scholars from using their time, creativity, intellect, training and goodwill to serve the public. Public scholarship is not necessarily something that should be required of all, but this does not mean it cannot or should not be rewarded for those who do it well.

Three examples of activities that might be given more weight as “public scholarship”:

1. Public engagement that draws from a faculty member's training, expertise and experience to participate in activities that benefit community organizations, including public speaking, workshops and volunteer work;
2. Publishing work that draws from a faculty member's training, expertise and experience in non-academic venues, and those suitable for broader audiences, for example, through newspaper, magazine, online and televised media; and

3. “Clinical” work that draws from faculty knowledge, in all fields, rather than only those in which it is most familiar and accepted (e.g., law, education and medicine).

A university that emphasizes the value in rewarding public engagement by scholars who are so-inclined can reap important benefits for the public, for scholars and for the stature of the institution by improving the public’s understanding and appreciation of how higher education touches citizens’ lives. The systems in place for the evaluation and reward of scholarly work are important, because they emphasize the judgment of peers who hold their colleagues to the highest professional standards. These systems should not and need not be undermined or diluted, but they can be strengthened in ways that recognize and reward scholarship and related outreach aimed at enhancing public understanding about art, science, engineering, law, literature, history, philosophy and much more. Through administrative efforts to focus attention on and reward public scholarship, the university can become a place that bridges academia with the outside world and enhances mutual understanding and trust. A robust commitment to public-facing scholarship is one important way that the university can have a central voice in what constitutes the public good.

Recommendations

The theme of embracing our role as a public research institution serves as the overarching framework for the other proposals that have emerged from Academic Futures. Our most urgent recommendation, in other words, is to encourage CU Boulder to embrace its identity as a public comprehensive research and teaching institution and to construct its future around that identity. The recommendations that follow support this central identity.

As discussed above, being a top-tier public research university means serving the public good by providing research and teaching that: (1) creates knowledge for the public; (2) engages with problems that affect the public; (3) enables each generation of citizens to advance our democracy by equipping them with skills of critical reasoning and analysis and a broad sense of civic obligation to the state, the nation and the world.

Our recommendations to start work on meeting those goals are:

- Enhance and prioritize the role of a liberal arts education as a key component of all our students’ education by exploring a common curriculum, examining funding models for teaching and research, scholarship and creative work and supporting interdisciplinary and cross-campus initiatives.
- Protect and seek public funding; ensure that private funds do not interfere with academic or research freedom; continue to work to keep education at CU Boulder affordable and embrace a goal of ensuring that every student can graduate debt-free; provide funding and support for inclusive excellence across the board, for undergraduates, graduate students, faculty and staff.



- Support and encourage public scholarship and engagement throughout the campus.

II. Inclusive Excellence

The Academic Futures Committee joins with the rest of the campus in affirming diversity and inclusive excellence as foundational values for the University of Colorado Boulder. The committee has acted upon that affirmation, first, in its process, which sought to include diverse groups of campus constituents in our conversations about how to improve upon our excellence in teaching and learning, discovery and creation; and second, in its recommendations to the campus where inclusive excellence is seen as part of all our work together and not as a thing apart or separate. In making its recommendations, the committee celebrates the good work done in making excellence inclusive by many groups on campus, including the Office of Diversity, Equity and Community Engagement (ODECE) and its Diversity, Inclusion and Academic Excellence Plan (DIAEP) Authoring Committee, Foundations of Excellence and the Faculty of Color group. As part of the academic futures conversations on inclusive excellence, we think it is important to recognize explicitly that the work of creating a diverse, equitable and inclusive campus is never done, that we are far from perfect in our attempts at doing so and that we will strive continuously to do better and to be better as a community.

In the context of the core public identity for the future of CU Boulder, we want to underscore that as a public university working for the public good in multiple ways, and educating students who contribute to the public good, it is essential for us to have a diversity of students, staff and faculty if we are to achieve our mission and strategic imperatives. In parallel with the Diversity, Inclusion and Academic Excellence Plan, we want to emphasize that the most innovative and impactful teaching, learning, research, creative work and community engagement require that our students, staff and faculty comprise diverse races, ethnicities, genders, sexual orientations, income levels, abilities and national origins, to name just some of the important identities and experiences that sustain originality, processes of discovery and the creation of knowledge. This is at the heart of inclusive excellence, for the work we do simply cannot reach excellence in homogeneous contexts. In addition, the university cannot fulfill its democratic purposes and prepare competent democratic citizens within a homogeneous community.

These commitments to diversity and inclusion are prioritized and emphasized throughout the Academic Futures analyses and recommendations in this report. We note, for example, that the Academic Futures recommendations related to student, staff and faculty success, internationalization, teaching and technology and interdisciplinarity all take up diversity, equity and inclusive excellence as core to those efforts.

We applaud the work of the DIAEP Authoring Committee as it seeks to create a plan for action on making excellence inclusive across the campus, and we look forward to the final report that

will be issued this fall semester, after our report has already been released to the campus. We do know that the draft report sets three key goals:

1. Climate, creating “a richly diverse, inclusive and equitable learning and working environment,”
2. Infrastructure that will “empower individuals and units to devise and implement policies, systems, professional development activities, organizational learning, data and accountability structures,” and
3. Leadership, “creating a permanent focus on diversity, equity and inclusive excellence as an understood shared priority among central and distributed campus leaders at all levels.”

We believe our report also suggests concrete ways to reach these goals, and we address what the DIAEP Authoring Committee calls “CLIMB”, the “five areas of focus”:

- Cultivate success for a diverse undergraduate/graduate student body with new financial resources and programming
- Learn of and lead effective efforts to attract and retain a diverse faculty and staff
- Increase financial resources and incentives to undertake diversity and inclusion work
- Move accountability for diversity and inclusion from the periphery to core institutional functioning
- Build institutional infrastructures and human capacity to implement the plan

In advancing the CLIMB to institutional distinction in diversity, inclusion and academic excellence, the Academic Futures Committee has integrated these efforts in every section of the reports and its recommendations.

III. The Five Projects

The Academic Futures Committee recommends five areas of concentrated effort for consideration:

- 1) Student-Centered Learning
- 2) Interdisciplinarity
- 3) Internationalization
- 4) Technology and Education/Online and Distance Education
- 5) Supporting, Sustaining and Inspiring Our Community

Each area has several sets of recommendations, many of which have common underlying processes, challenges and solutions. Each of these areas has the potential to change, fundamentally, how we, as a Research I public university, undertake both our research and our educational enterprise.

Project 1: A Common Student-Centered Approach to Learning

Big idea: Disrupting conventional ideas of teaching and learning by declaring ourselves a student-centered campus

Goal: Coordinated and collective efforts in undergraduate teaching and learning, including a common learning experience, a teaching and learning center and a unified approach to advising

Concrete first steps:

- Within one year, formulate and then implement a plan for a campus-wide common curriculum.
- The first-year experience should be a collective, campus-wide effort involving both academic and co-curricular offerings which must be coordinated between and across units. Funding for academic courses related to the first year experience should be handled by the provost's office so that, for example, departments are not penalized for offering small first year seminars.

Introduction and Context

The Academic Futures Committee, both in its own meetings and in its campus-wide conversations, spent more time talking about undergraduate education than any other topic. The committee strove to look at the university through the eyes of the undergraduate student and to ask the fundamental question: how do the university's people, offices, structures and systems support the undergraduate journey? And how might our practices be streamlined to better serve every undergraduate student's needs? Much of the conversation on our campus and in the nation around undergraduate education has focused on the notion of student success. While that phrase can be reduced to the metrics of graduation rates and the years needed to complete a degree, we thought of student success as defined by having a rich life, as finding one's way to the good life, in all senses of that phrase. We talked of the students' experience as a journey of discovery, one that begins long before they come to CU Boulder and that continues for the rest of their lives. How do we make sure that their time in our community prepares them to prosper on this journey and to enjoy it?

Many discussions centered around the notion that any educational institution is defined by the students it graduates. Currently, when asked, "What does it mean to be a Buff?" many students will reply with thoughts about CU Boulder sports and social life. While these are crucial facets of our student experience, the committee hopes for a set of expectations tied to CU Boulder's institutional mission and identity. When we ask students what kind of Buff they want to be, we

cannot stop with “I’m a history Buff,” for example, but must go on to state the ethical and intellectual qualities that should mark our graduates. In its recent planning exercise, the College of Arts and Sciences has committed itself to educating critical, creative and compassionate students. We share those values, seeking to equate Buffs with honor, integrity, respect and a commitment to the public good. CU Boulder Buffs should exemplify an understanding and engagement in diverse perspectives and inclusive excellence. In line with the university’s Strategic Plan, we endeavor to strengthen our drive toward leadership, innovation and impact. Buffs, developing within our community, will come to understand what it means to lead, to collaborate and work as a community member, when one needs to stand up to lead and when one needs to stand alongside others. Buffs will be creative and innovative, while attuned to an awareness of their surroundings, a knowledge of the rich inheritance of global cultures and an appreciation for the physical world we must protect. To rise to these challenges, Buffs must have core knowledge, skills and experiences upon which to innovate. Buffs will have an impact on their world through public engagement—serving the campus-community, our local, diverse neighbors and Colorado, the nation and the world.

We put our students at the center of our mission when we determine what it is we believe they need to know and to learn. We disrupt what we do now by always asking ourselves how our work specifically creates the kinds of students we want to represent CU Boulder. Of course, we also put our students first when we address the experiences, the needs and the gaps in education they bring to the campus.

We have all recognized for some time that our students’ experiences are highly varied across our campus, working well for some and falling short for others. The Academic Futures Committee wants to applaud the important work of the Foundations of Excellence initiative (https://www.colorado.edu/unified-experience/sites/default/files/attached-files/all_students_dimension_report_final.pdf) and the Unified Student Experience project (<https://www.colorado.edu/unified-experience/>) to tackle these issues, and we support the expansion of their good ideas to include the entirety of the undergraduate experience and to equip our students for life-long learning. We suggest that this effort also needs to include a coordinated and comprehensive approach to student advising to ensure that all students are supported from the time they arrive on campus through their graduation. Furthermore, we need to ensure that the admissions process, orientation, academics, housing and student life offer a unified experience with a shared set of objectives. We also recognize that the faculty and staff need support and incentives to do this good work.

We also recognize that students are learning in new ways, using new modalities. As we try to indicate throughout this report, we need to make sure our educational efforts are accessible, flexible and interdisciplinary. There is no dearth of interesting ideas about how to offer education at CU Boulder: i.e., mini-courses offered throughout the semester; stacked credentials; required

minors; the abolition of departments and degrees. While we are intrigued by many of these ideas, they strike us as belonging to the “how” phase—how do we improve our educational offerings, for example. We are in the “what” phase: trying to set out some general guidelines for focusing our campus on our students, in line with CU Boulder’s institutional mission and identity.

This report recognizes the persistent and important tension between centralizing functions and allowing local autonomy. While many things are best handled at the unit level, closest to the students and to the faculty and staff, we do urge a campus approach to common educational experiences and advising, and we do join with Foundations of Excellence in calling for a Center for Teaching and Learning to help create the faculty support for a unified student experience.

Plan of Action and Recommendations

We have several specific recommendations on creating a student-centered campus:

Recommendation: Working with the deans and in collaboration with Foundations of Excellence and other campus initiatives, create a Campus-Wide Common Learning Experience, drawing upon, for example, Foundations of Excellence and the Unified Student Experience project, to define educational touchpoints throughout the undergraduate experience, including research opportunities and public service learning as part of every student’s graduation plan. This Common Learning Experience should encourage student agency.

Through Foundations of Excellence and other efforts, we have identified ways to provide all of our students an excellent first year (FY) at CU Boulder. For example, our colleagues have stressed the need for every student to have a small, academically intensive first year experience. They call upon the campus to “[c]oordinate existing campus resources for small FY classroom experiences so that the university can assure that every FY student has a small academic environment with ongoing individualized instruction and peer-to-peer relationship building. Programs that already reach this outcome, including Residential Academic Programs, First-Year Seminars, Program in Writing and Rhetoric courses, Miramontes Arts and Sciences Program, McNeill, TRIO, Norlin Scholars, President’s Leadership Class, ROTC and the Writing Center (for repeated writing assistance), should be funded, replicated and coordinated.” The Academic Futures Committee supports such recommendations. It worked closely with Foundations of Excellence and strove to coordinate its report with their work.

Thinking beyond the first year, Academic Futures focused on the remainder of the students’ careers at CU Boulder and beyond. We thus tried to imagine a common learning experience for students over four years. Studies by the American Association of Colleges and Universities (AAC&U) have indicated that, in the last ten years, campuses across the country have increasingly stressed the need for common educational curriculum and experiences. Focused primarily on general education, 78 percent of AAC&C members indicate they have a common

set of intended learning outcomes for all of their undergraduate students. These outcomes cover a wide variety of literacies and skills (writing, critical thinking, quantitative reasoning), as well as common areas of knowledge (humanities, sciences, social sciences, global cultures).

The ways of achieving those learning outcomes vary. While 80 percent of AAC&U members use a distribution model, only 15 percent use that model on its own. For example, 41 percent require a common intellectual experience, 36 percent require one or more thematic courses and 24 percent use learning communities. 68 percent of provosts indicate that service learning courses should be part of the common curriculum, 62 percent cite internships, 58 percent first-year seminars, 56 percent diversity courses and 51 percent interdisciplinary courses.

Only 30 percent of respondents to the AAC&U survey indicated that they used a mandatory core curriculum. However, there is a wide-spread recognition that general education distribution models are inadequate to meeting the needs of our students. Debra Humphreys, senior vice president for academic planning and public engagement at AAC&U, has indicated that "many people theoretically get that it's not adequate" to just create categories of courses for students and require them to take some number of courses in each category. She goes on to note, however, that "institutions are still organized largely by disciplinary categories that correspond to knowledge areas." As a result, colleges "continue to chip away" at reliance on distribution requirements "but we're still not quite there yet" in terms of moving to an entirely new model.

Research and experience have demonstrated that common experiences, particularly when offered in small-class sessions where students are able to get to know their teacher, improve student learning and satisfaction and thus student success. The Academic Futures Committee urges the campus to build on the work of Foundations of Excellence to provide such successful "high-touch" programs for our students. A set of common educational experiences and/or courses can define who we are by indicating the kinds of students we wish to nurture; this common curriculum can embody the values of, say, inclusive excellence, the public good and interdisciplinarity explored elsewhere in this report. The committee does recognize that it is difficult to deliver many of these programs to every student, which has led elsewhere to the reliance upon distribution requirement models in the place of more structured common educational experiences.

The University of Colorado Boulder is unusual in the state and among its peers in lacking a campus-wide common curriculum. Such a curriculum can do many things: it can signal the values of the campus, as noted above; it can make it easier for students to move from one school or college to another school or college; it can protect our commitment to the liberal arts, as outlined in this report's call to affirm our mission as a public research university. A campus wide common curriculum can be an important means for the campus to define itself in a way that serves its students. We, of course, recognize that beyond a common experience, students

need specialized educational opportunities to prepare them for the work force. A common curriculum, however it is designed, is usually seen to revolve around a set of core literacies and/or competencies, as for example outlined by the Partnership for the 21st Century (<http://www.p21.org/our-work/p21-framework>).

We could pursue at least three different approaches to developing a common campus educational experience: create a set of general education requirements; build a core curriculum in which all students take the same courses; establish a set of shared experiences that all students should have. We propose a mix of the latter two.

The simpler part of this proposal can be envisioned as a spine running through the four years of undergraduate education, with students having similar educational experiences at the appropriate moments in their education. The Academic Futures Committee has looked at models at other universities and noted the kinds of experiences that have improved student learning and persistence. The committee proposes the following as a good model for a set of core experiences that would be met by different courses in different departments, schools and colleges.

In their first year:

- A one credit “CU 101” course—A small, seminar-style course that provides a supportive environment to help students take an active role in their education, transition into the college academic atmosphere and become an ethical member of university community; these courses could be designed by the individual schools and colleges or by the campus while adhering to a common set of objectives.
- A freshman seminar—an expansion of our highly successful program being run out of Undergraduate Education; these courses have proven to provide students with rich educational experiences that introduce them to the kind of academic work done at the university.

These classroom experiences would serve to help transition students to university life, acclimating the student to campus, fostering academic success and independent exploration. The remaining three years would broaden a student’s perspective, more and more focused on the global community beyond our campus.

In their second year:

- A course focused on critical thinking/communication;
- A course involving engaged scholarship/research such as a service learning course.

In their third year:

- A course focused on research, scholarship or creative work that involves hands-on learning. Ideally, the course would include some sort of off campus component via research, internship or community engagement.

In their fourth year:

- A capstone course within the discipline.

This model would create an approximately 16 school credit hour (SCH) group of core experiences that, again, would be fulfilled in different ways by different units. The committee recognizes that any such model would need to be adopted by the faculty.

The second part of the combined education model we have considered would involve a shared campus curriculum that might contribute to some of the experiences above but that might also provide a collective body of knowledge and skills beyond shared experiences. A relatively easy solution would be to adopt a version of the College of Arts and Sciences general education requirements. Most of the schools and colleges already draw on those requirements.

A bolder model, sometimes referred to as the University of Chicago model, would establish a core set of classes that all students would take, so that they would truly have a shared body of knowledge and experiences. For example, every student might take a class in Global Visual Cultures. The difficulty with such a model is that it requires a large body of faculty dedicated to teaching these particular courses so that they can reach every student. It is not clear we could mobilize the necessary faculty to do this. Another possibility is to create a set of literacies, competencies and/or fields of knowledge for which multiple departments would design new, dedicated classes, so that there would be a range of courses to fulfill any one requirement.

These courses would both provide a general introduction to any student interested in a subject and be a gateway for students who might be attracted to a particular major. For example, all the biology departments might collectively provide an introduction to “Life,” that could be a collaborative, even team-taught endeavor or a series of classes arising within particular departments but having a shared set of competencies, learning goals and so on. We might offer a set of classes on “The Earth and its Climate” that could draw on expertise in geological sciences and environmental studies. We could imagine classes on “Justice” or “Defining the Good Life” or “Telling Stories around the World.”

To pursue these ideas, we recommend that the provost convene a campus-wide committee, with a reporting date of September 2019, to explore the possibility of a shared campus curriculum. While the Academic Futures Committee is not in a position to design a common curriculum, they recommend specific principles to be considered by a new committee moving forward on this project:

1. If we create a common core of classes, they should be newly designed or redesigned classes that specifically are intended for general education (that is, do not simply offer “Introduction to British Literature” because it is currently offered).
2. Classes taught in a common curriculum should not be subject to departmental or college budgeting. This should be a shared effort with shared funding.
3. A clear process for the approval of a campus-wide common curriculum, whatever its design, must be set forth.
4. A new campus-wide undergraduate curriculum committee, housed in the Office of Undergraduate Education, should be established to manage the common curriculum and oversee collective efforts on undergraduate education.

Recommendation: The schools and colleges should make available research experiences and/or internship and community engagement opportunities for undergraduates, and students should be strongly encouraged to take advantage of such offerings. This effort should include support and incentives for all parts of campus to design, develop and scale research and internship experiences for their students, with such experiences becoming a hallmark for each department.

This recommendation embodies support for high-impact educational experiences. A key component of a student-centered approach to learning is offering opportunities to excite and engage students at every level of their experience. These include high-impact educational experiences, such as undergraduate research opportunities (both in class and as part of ongoing research groups), as well as internship and community service opportunities. We have outstanding examples of these high-impact opportunities (CURE, UROP, etc.), but we can do more. We can offer our students, as a hallmark of their career at the university, the opportunity to expand their learning beyond the classroom and to gain real world experience and skills that will be valued not only by employers but also by our students who will acquire a mindset of life-long growth and learning. We must use research-based best practices to formulate mentoring models, design evaluation and promote scalability, particularly for parts of campus for which this is a new effort.

Recommendation: Working with the deans and in coordination with Foundations of Excellence implementation, develop a coordinated and comprehensive approach to undergraduate and graduate student advising to ensure that all students are supported throughout their career at CU Boulder.

All signs indicate that the transition into campus life can be significantly eased by a strong student/advisor relationship. More than anyone else, the advisor holds the cards to ensure

student success. An advisor can help students transition to university education, can help them understand the resources available to them and can guide them through their educational journey. However, this important task is a difficult one. The current advising system does not allow our advisors the time and resources to offer such support. Currently, advisor caseloads are too high. The time needed to understand a student's capabilities, interests and needs is not a luxury, as our current model might suggest, but a necessity. Currently, our advisors are more akin to practitioners at a free clinic, addressing a patient's needs as quickly as possible, trying to stay ahead of the ever growing line of patients at their door.

Additionally, this model affords no time for the advisor to be a functioning part of the curricular community. Tied to their offices and computers, they do not have the opportunity to learn about the departments that they serve. Advisors should be seen as partners in the educational experiment, being able to attend faculty meetings, to visit classes, to acquaint themselves with curricular developments or to explore curricular paths and opportunities outside their target audience. We see here now an all too prevalent model of isolation, crippling our ability to function as an effective team.

There are certainly some good projects under way, and Foundations of Excellence recommends, "Try new models of advising to strike the best balance we can of personal attention, appropriate type of advice and financial feasibility. Commit more seriously to the model of advisor as first-point-of-contact." Pilot advising programs in both Environmental Design and Biology address the shortcomings referenced above. As outlined in the ACE white paper (<https://www.colorado.edu/academicfutures/2018/01/25/cradle-grave-advising-and-ace-approach-model-school-environment-design-and-sustainability>), academic advisors carry relatively small caseloads while maintaining substantial programmatic and liaison responsibilities in small groups of professional, full-time advisors. Associated with related work in a co-located area in a "neighborhood of advising units," advisors have strong working relationships with departmental faculty and regularly attend faculty meetings and visit departmental courses in order to maintain strong disciplinary knowledge of their designated areas. Co-located, advisors, students, faculty and staff are able to comingle with their counterparts in the related departments, encouraging a cross-department fluidity that surpasses campus siloes. Following a 'cradle to grave' approach, advisors foster students from arrival in the discipline to graduation. These pilots address the shortcoming outlined above: smaller caseloads (250 – 350), strong departmental ties and a deep understanding of their disciplines. This model fits extremely well with the re-invigoration of mentoring by faculty around the content of the discipline and the possibilities to pursue work and careers within it.

While the ACE/neighborhood model might function well for students with a focused area of study, there would remain an advising need for students who are truly exploratory, including so-called Alternative College Option (ACO) students. The current Undergraduate Exploratory

Advising Center (UEAC) has been created to address this need. The UEAC can help guide students into the majors, schools and colleges that best fit their needs. The UEAC can also serve as a central home to those academic programmatic functions that are not departmental or college specific (e.g., Early Alert programs). As Foundations of Excellence puts it, “Unify, or at least better communicate, policies that currently differ across campus. Some of the policies that affect a lot of students include: Transferring programs or changing majors; class repeat; class drops; semester withdrawals; and academic standing.”

Again, one of the challenges that students continue to express is the feeling of “bouncing around the university” when it comes to advising. The UEAC should be used as a policy and governance hub when it comes to advising issues and imperatives, such as academic advising curriculum, required advising policies, group advising and support, defining the role of an advisor and establishing synergies between the colleges/schools, the Division of Student Affairs and ODECE so that services are not replicated. We need to continue to experiment with advising and to coordinate those experiments.

Recommendation: emphasize the importance of teaching excellence through a comprehensive review of annual merit and promotion and tenure processes. Ensure that the time and energy involved in teaching efforts are rewarded appropriately.

Creating a public university that embraces its educational mission alongside its research mission is a critical step in creating a student-centered campus. If we want faculty to teach a CU 101 section or participate in the first-year seminars, we need to make sure that the proper incentives are there, both in terms of direct compensation (whether by counting these courses as part of one’s load or by providing additional pay) and in terms of recognition in merit and promotion and tenure processes. The proposal in the section on interdisciplinarity of granting the tenure track faculty control over every fourth course they teach is another mechanism to support such efforts. As we also discuss in the Faculty Success section of this report, we need a campus-wide conversation about our criteria for excellent, meritorious and less than meritorious teaching. While these criteria need to be defined in each unit, we need a campus-level conversation about what we mean by teaching excellence and how we want to recognize it.

Recommendation: Establish a Teaching and Learning Center, a centralized community space, dedicated to teaching and learning that transforms our teachers and students and is instrumental in solidifying innovative, research-based teaching practices as a cornerstone of the university.

There have been recommendations for a Teaching and Learning Center from ARPAC, Foundations of Excellence and a Teaching and Learning Center taskforce (represented in a white paper). The Academic Futures Committee understands that there is currently a new

committee tasked with establishing such a center. We applaud this effort and urge a decision to create such a center be made as soon as possible. We recommend placing this center under the new Vice Provost for Education proposed in this report.

Recommendation: The first-year experience should be a collective, campus-wide effort involving both academic and co-curricular offerings which must be coordinated between and across units. Funding for academic courses related to the first year experience should be handled by the provost's office so that, for example, departments are not penalized for offering small first year seminars.

Colleagues made it clear that current budget models, at least as they are implemented in the schools and colleges, impede the kind of pioneering, innovative work we need to do on teaching and learning. We must make sure our budget models expand the possibilities to be creative in the classroom and in other learning situations.

Project 2: Interdisciplinary Teaching, Research and Creative Work

Big Idea: Affirm interdisciplinarity as a key value in our teaching, research and creative work

Goal: Expand our status as a dynamic center for interdisciplinary teaching, research and creative work by eliminating impediments to that work and by clearly rewarding these efforts

Concrete First Steps:

- Grant the tenured and tenure-track faculty control over every fourth course they teach in order to invest it in team-teaching, interdisciplinary programs or any other endeavor they wish to join.
- Create a Vice Chancellor for Interdisciplinary Teaching, Research and Creative Work and Dean of Interdisciplinary Faculty who, among things, will work to transform our evaluation of interdisciplinary efforts in personnel decisions and budgeting.

Note on Terminology: Educational, research and creative endeavors that cross disciplinary boundaries can go by many different names, depending on the type of scholars involved, the landscape in which the work is being done and the aim of the pursuit. With every intent to incorporate interdisciplinary, transdisciplinary, non-disciplinary, etc. into our mission, we use the term “interdisciplinary” to signify this group of concepts. As well, we fully respect that interdisciplinary teaching, research and creative work is not just an endeavor in STEM fields, but rather, it spans the entire range of human inquiry and creative expression.

Introduction and Context: Since the founding of the first institute at CU Boulder in the 1960s, interdisciplinarity has been a key feature of our identity. As we move into the future, the Academic Futures Committee endorses this vision:

- A university in which faculty, staff and students can engage in research, creative work and teaching across disciplinary barriers, valuing the perspectives and participation of arts, humanities, social sciences, natural sciences and professional schools.
- A university that breaks down boundaries between research and creative work, scholarly engagement, service to community and student training in ways that enhance one another.
- A university whose structure and processes—including such as budgeting, evaluation and reward structures—encourage and enable interdisciplinary teaching, research and creative work by faculty, staff and students.

Academic disciplines exist for good reasons. They represent significant subjects of inquiry, creativity, discovery and collective wisdom that have been established over time and have been shown to have lasting importance for society, culture, the environment, human health and much more. Long-standing academic disciplines have been tempered by the standards and scrutiny of scholars who have been trained to make valuable judgments about matters of relevance, accuracy, validity, beauty and truth. Sometimes, scholars who have demonstrated competence and mastery in one discipline find themselves looking beyond the limits of their own domain of inquiry and/or creative expression in order to form richly rewarding partnerships with members of other disciplines. Some of the best, most high-profile collaborative work done by scholars across the CU Boulder campus transcends the boundaries of two or more disciplines. The Academic Futures Committee believes that such successful efforts at interdisciplinary teaching, research and creative work on the Boulder campus should serve as models for the campus as a whole, and for the central administration in particular, on how best to facilitate basic and applied interdisciplinary inquiry and expression.

Most scholars and academic administrators agree that academic disciplines should not serve as exclusive silos where interdisciplinary communication and collaboration are discouraged. But it is easy to see how the evaluation and reward structures for scholarly performance tend to guide scholars to construct and obey disciplinary boundaries. And of course, when such boundaries represent commitments to rigor and high standards, they should be preserved and even celebrated. However, when disciplinary boundaries become impediments to arriving at the best research solutions or means of creative expression, or when such boundaries become the cause of wasteful redundancies, scholars should be encouraged and supported in their efforts to pursue novel and potentially fruitful ways of making disciplinary boundaries more porous.

The world's modern challenges rarely exist in a single line of inquiry and often need nimble and flexible research structures that incorporate the varied approaches and perspectives of different types of expertise. Such problems require knowledge, creativity and experimentation, and they require fresh and original queries borne of unforeseen discoveries.

CU Boulder could enhance our impact through more coherent and supportive organization of campus resources and talent in our engagement with society's most complex problems, both great and small, and by partnering with key groups and actors such as governments, industry, NGOs and thinkers to bring solutions from conceptualization to implementation. We must always remember that such problems range from contemporary threats such as climate change to perpetual concerns such as the nature of justice or the meaning of a good life.

Moreover, by fostering and developing research endeavors that cross and meld expertise from many different disciplines and by creating linkages with similarly inclined outside groups

including industry, we create new opportunities for students to capitalize on unique and extraordinary avenues of discovery that go well beyond the standard classroom environment.

Many parts of the campus and its faculty is already addressing many of the world's most pressing problems, but we must insure that we allow such efforts to flourish. Impediments to expanding our role in solving these challenges are varied and not unique to our institution: long existing and mostly solitary disciplinary structures, rigid and constraining administrative and budgetary structures, disincentives to pursue risky and uncertain avenues of scholarship that step beyond familiar disciplinary domains.

CU Boulder can and should build on the world class teaching, research and creative work that is already going on, while also pushing discovery and innovative forms of expression into new interdisciplinary frontiers that help to address the problems and opportunities of a 21st-century world.

The impetus for a broad initiative towards interdisciplinarity stems from aspirations expressed by faculty, students and administrators who address our educational mission along with our imperative to produce high-value research and creative work that will benefit humanity and our understanding of ourselves. Drawing upon our discussions across campus, the numerous community papers submitted that advocate for a stronger campus commitment to supporting interdisciplinary teaching, research and creative work and research on the impact of interdisciplinary efforts, the Academic Futures Committee endorses: (1) greater support for collaborative, interdisciplinary teaching, research and creative work that addresses complex, multi-faceted problems; (2) a strong commitment to including a wide array of stake-holders, from students to those beyond the university; and (3) recognition of the value, time and flexibility required to facilitate and participate successfully in such endeavors.

An overarching goal is to reduce the siloing of academic disciplines and to bring together faculty with shared interests in addressing complex problems and areas of study in their teaching, research and creative work. A university that not only endorses but supports interdisciplinary work should commit significant resources to facilitating teaching, research and creative partnerships across the campus, not just within specific departments or colleges. A bold, campus-wide commitment is required to complement and to enhance the work already being done by many departments/units, but which at the same time allows for learning and scholarly growth in new directions.

Students are excited by the opportunity to acquire new skills and knowledge and by the prospects of applying those skills and knowledge to address vexing problems and to create new openings that have the potential to better our lives. They often arrive at the university less invested in gaining a degree in a particular discipline than in pursuing a problem or a complex,

life-long career path, and they look for knowledge, skills and guidance to take off in that direction. Their use of existing structures clearly signals a strong inclination toward education that melds and crosses disciplines. For example, in 2017, approximately 43 percent of the students at CU Boulder graduated with a double major or minor, which is a clear indication of widespread desire to cross disciplines and to synthesize knowledge in ways that traditional disciplines often are less prepared to enable.

Plan of Action and Recommendations

There are many different ways to encourage and foster interdisciplinary teaching, research and creative work. We offer the following recommendations.

Recommendation: Dramatically increase campus support for interdisciplinary teaching, research and creative work with a particular focus on problems and opportunities that address public needs and/or involve public engagement.

Interdisciplinary work often is problem- and opportunity-centered, rather than discipline-centered, and it often calls for closer interaction between the university and segments of the public. Such efforts can underscore our status as a public research university. If such interdisciplinary work is to be encouraged, the campus needs to support it in tangible ways, for example, by committing more fully to encouraging civic engagement and service learning through public scholarship, internships and other mechanisms designed to reward faculty and students for pursuing a more prominent and public-facing aspect to their work.

Perhaps the greatest possibility for new directions is in integrating scholarly and educational pursuits by addressing some the world's great challenges. Such integration can take many forms and occur in a variety of arenas, including:

- Aiming to provide alternative educational experiences for students, while also engaging with problems and stakeholders in the community and around the world;
- Creating courses built around the problem-solving approach of the working group and that involve different skills and perspectives;
- Promoting engagement and partnerships with experts, stakeholders and supporters beyond the academy;
- Involving students in experiential and research-based education, thereby accommodating a wider range of learning styles, particularly among non-traditional students;
- Providing administrative support and infrastructure to encourage faculty to collaborate on novel research problems and opportunities for creative expression;

- Recognizing that novel forms of interdisciplinary collaboration may have limited lifespans and are not intended to be permanent. Periodic reviews and sunset dates can provide markers for fruitful life-cycles of interdisciplinary work;
- Focusing on teaching, research and creative work that builds a diverse and interdisciplinary workforce that is capable of solving complex problems.

Recommendation: Expand our interdisciplinary and co-teaching educational offerings at both the undergraduate and graduate levels.

The campus administration should encourage faculty to develop and deliver curriculum that reflects a commitment to innovative inquiry and creative expression, without regard to disciplinary strictures. As a top priority, we recommend that the campus adopts the rule that every fourth course belongs to tenured and tenure track faculty members. In other words, every fourth course taught by a tenure track faculty member could be used for co-teaching, for an interdisciplinary program outside one's department, and so on. Co-teaching or team-taught courses, either jointly or perhaps sequentially, within and across departments and colleges would be a particularly effective way of expanding interdisciplinary programs. Additionally, this could include flexibility to provide mini-courses (those in increments of less than 3 credits) and courses specifically meant to attract students with a variety of interests and skills to foster a unique classroom environment.

Although graduate and undergraduate education differ in a variety of ways, some of the issues requiring campus-level intervention and support for interdisciplinary undergraduate and graduate education are the same. In order to avoid resource redundancy, it would be beneficial for developing similar or the same administrative structures and policies to serve the both graduate and undergraduate programs.

Recommendation: Develop the necessary administrative infrastructure to support interdisciplinary teaching, research and creative work.

Much of the outstanding and path-breaking work that is being done at CU Boulder already includes a significant degree of insight and expertise across fields and disciplines. With the aim of building upon existing knowledge about how to make interdisciplinary teaching, research and creative work succeed, the campus should develop consistent and generalizable approaches that not only affirm its commitments to existing interdisciplinary work, but also help new forms of interdisciplinary work to emerge and succeed. To that end, the following administrative steps should be considered.

- Oversight of interdisciplinary teaching activity needs to be organized and maintained in such a way as to involve all participating academic units (departments, schools,

colleges, centers, institutes). To that end, the position of Vice Chancellor for Interdisciplinary Teaching, Research and Creative Work should be created.

- Physical resources (space and facilities) designated as “interdisciplinary” require administrative oversight by entities that do not reside solely in one of the participating academic units. We need to create more formal ways for instrumentation and other assets to be shared across various groups and projects. The committee finds important suggestions in the paper on this topic submitted by Greever, Ramirez-Aguilar, et al. (<https://www.colorado.edu/academicfutures/2018/01/25/improving-research-teaching-and-innovation-shared-equipment-resources-greever-ramirez>).
- Incentives and evaluation structures for interdisciplinary teaching, research and creative work should be promoted at the campus level to ensure stable standards that apply equally to any given interdisciplinary configuration, especially when the group involved is derived from more than one School or College. For cases in which the interdisciplinary configuration lies entirely within a School or College (for example, three departments inside A&S), a parallel set of standards should be maintained by that School or College.
- Budget approaches to interdisciplinary work should be designed to provide equitable financial treatment to participating academic units, for example, with respect to the allocation of grant- and contract-based ICR. As well, equitable alternatives to the prevailing Student Credit Hour (SCR) model should be sought for funding interdisciplinary faculty and graduate student lines.
- Minimize start-up costs and administrative barriers to launching interdisciplinary work.
- Tenure and promotion criteria need to recognize and support non-conventional teaching arrangements and instructional experimentation, and faculty engaged in interdisciplinary research and/or creative work should be evaluated according to transparent criteria that are articulated by participating units.

Recommendation: Review major interdisciplinary investments and activities on campus, with the aim of assessing whether the associated human resources and facilities are being mobilized as well as possible to serve the campus and the public.

CU Boulder excels in many ways in supporting world-class teaching, research and creative work that crosses interdisciplinary boundaries. But it is inevitable that new needs should prompt the reconfiguration of existing resources to support cost-effective interdisciplinary work. The Boulder campus could do a better job at eliminating redundant efforts in teaching, research and creative work through strategic integration of existing resources.

The campus, perhaps through the proposed Vice Chancellor for Interdisciplinary Teaching, Research and Creative Work and drawing upon the program review process, should examine a

range of interdisciplinary efforts that might be strengthened and expanded or that might be connected and even combined. Among other examples, we should examine:

- The humanities and arts, including the Center for Humanities and the Arts, the Humanities Program in Arts and Sciences and the Herbst Humanities Program in Engineering and Applied Science. Can we better integrate these units to promote interdisciplinary teaching and scholarly and creative work?
- Technology, arts and media including ATLAS, CMCI and Cinema Studies and Moving Image Arts among other arts units. ATLAS, currently housed in CEAS, was originally designed to be a campus-wide asset supporting work in technology, teaching, media, the arts and more. CMCI was created as a new kind of interdisciplinary college in order to bridge disciplines from engineering to the arts. And yet, the leadership and faculty of CMCI and of related departments within Arts and Sciences and the College of Music have very little influence on the footprint or the design of ATLAS curriculum. The resulting redundancies in offerings contribute to unproductive competition among colleges for human resources (faculty, staff, students), space and facilities. Such redundancies come at the expense of what could be a richer range of student experiences. How can we best think about supporting the cross-campus, cutting edge work of ATLAS? How do we engage across a range of units and colleges, including A&S, Music, CMCI and Engineering to reduce siloing and engage the synergistic power of cross-campus collaboration, the goal of our interdisciplinary work? The Academic Futures Committee recommends that the provost move to affirm ATLAS as a campus asset and support its evolution as a research institute. In addition, the committee recommends that the provost establish an ATLAS Education Council, comprised of ATLAS leadership, as well as representatives from CMCI, A&S, Music and CEAS, that will be charged with the governance of the ATLAS certificate and degree programs.
- Environment and sustainability across several disciplines, departments, schools and colleges (including Environmental Design currently housed in the Graduate School) explored in the 2013 task force on a School of the Environment and Sustainability. CU Boulder is internationally recognized as a leader in environmental research and is one of the top campuses in the world for students to study the environment and sustainability. An integration of these programs and units, whether within a school or not, could yield tremendous benefits for the campus, in terms of creating additional high-impact research and creative work, forming new pathways for student learning and success, enhancing community engagement and establishing a more powerful footprint for the CU Boulder in the global discourses about the earth's resources and how best to protect and sustain them.

These are prominent examples of where strategic decisions are required by campus administration about how best to effectively and efficiently mobilize existing resources to

maximize the impact of interdisciplinary teaching, research and creative work on the CU Boulder campus.

Recommendation: Create a Vice Chancellor for Interdisciplinary Teaching, Research and Creative Work who, as Dean of Interdisciplinary Faculties, will also serve as “Dean of the Institutes.” Make clear how this office works with the Research and Innovation Office to avoid duplication of efforts.

To accomplish the goals set forth in this section on interdisciplinarity, campus-level leadership is needed. As the committee has stressed elsewhere in this report, much of what we want to accomplish as a campus must be directed from the campus, even as we recognize that the work of teaching and learning, discovery and creation always occurs at the local level. The coordination of resources, policies and procedures needs someone to direct it.

Our very successful institutes will be aided if they report to an administrator dedicated to the kind of interdisciplinary work they pursue. There is also a need for faculty—tenure-track and research faculty—within the institutes to have a dean. In the past, these faculty reported to the Dean of the Graduate School. The campus has moved beyond that model, but we have not yet worked out the appropriate administrative structure for them. Faculty must report to a dean.

Project 3: Internationalizing the Campus

Big Idea: Act in the world to address the era of globalization

Goal: Coordinated efforts to provide essential support for our international students, to expand international opportunities for our U.S. students and to galvanize our international research and creative work, particularly as we seek to address challenges facing global society

Concrete First Step:

- Charge the proposed Vice Provost for Education with duties specific to accelerating campus-wide internationalization.

Introduction and Context

The University of Colorado Boulder has long discussed strengthening its international presence. There have been no less than 11 reports on international efforts over the past 15 years and the Flagship 2030 strategic plan imagined CU Boulder as a global crossroads of ideas and discovery, focused around a Colorado Center for Global Education, Research and Advanced Studies. Nevertheless, this discussion has not been confirmed through action. For internationalization to be part of our academic future, the Academic Futures Committee argues that the campus must make it a clear priority backed by a comprehensive and intentional international strategy and by concrete actions, most importantly assigning responsibility for international efforts to a faculty administrator.

The benefits of internationalization are significant. John K. Hudzik, in the NAFSA report entitled *Comprehensive Internationalization: From Concept to Action*, provides the following definition:

Comprehensive internationalization is a commitment, confirmed through action, to infuse international and comparative perspectives throughout the teaching, research and service missions of higher education. It shapes institutional ethos and values and touches the entire higher education enterprise. It is essential that it be embraced by institutional leadership, governance, faculty, students and all academic service and support units. It is an institutional imperative, not just a desirable possibility.

Comprehensive internationalization not only impacts all of campus life but the institution's external frames of reference, partnerships and relations. The global reconfiguration of economies, systems of trade, research and communication and the impact of global forces on local life, dramatically expand the need for comprehensive internationalization and the motivations and purposes driving it.

Hudzik's definition underscores the holistic, intentional and jointly outward- and inward-facing nature of internationalization. Indeed, his definition touches all of our chancellor's strategic imperatives as well as the core tasks of teaching, research and service. He recognizes that we face a world marked by the splendors and miseries of globalization and that universities must play a key role in responding to our era in a way that serves the public.

The Academic Futures Committee sees comprehensive internationalization as essential to our mission and to other goals and projects set forth in this report:

1. Internationalization is profoundly relevant to our research and creative work and to the impacts we achieve in communities worldwide.
2. Internationalization has clear connections with diversity and inclusive excellence.
3. As we rethink the first-year experience and the entirety of undergraduate and graduate education, internationalization appears as one way to enrich that student-centered education.
4. When we speak of online and distance learning, we talk about reaching students around the globe through a broad range of new modalities.
5. The success of all members of our community includes the success of our international community members.
6. We can improve our international networks and partnerships through long-term commitment efforts such as the chancellor's Global Ambassadors initiative.

As these connections attest, internationalization is not an isolated project but an underlying perspective that can help shape our core tasks of teaching, research and service. In the first instance, we must be sure we are supporting the international students we recruit. We must recognize that our international students often feel compartmentalized (at best) or like second-class students (at worst). We must do better by these key members of our community. Internationalization is also important for our U.S.-born students. There is a powerful case to be made for the need to prepare tomorrow's leaders for an increasingly connected society and to fulfill our mission as a university engaged in impactful research and service that is attuned to the world's pressing issues. As one person commented during our Fall discussions on a global campus, "an International campus at CU Boulder goes far beyond four or five years of getting to know international students. We have the opportunity to graduate students who have a culture of an international perspective and to affect their work, companies, children and world far beyond the halls of CU Boulder. The ripple of international awareness and collaboration grows exponentially." Internationalization of our curriculum and our research creates a path to the long-term relevance of our public mission in service to society by creating global citizens with the ability to address problems of international significance. Globalization is one of the most powerful forces in our world, bringing great benefits and causing equally great challenges and anxieties. CU Boulder must position itself to prepare our researchers, artists and students to

address those anxieties, to help solve those challenges and to ensure those benefits serve the common good.

Comprehensive internationalization is also critical to the University of Colorado Boulder's long-term reputation and impact. The issue is not that CU Boulder needs to become a global leader. Ranked 38th in the world and 26th in the United States by the authoritative Academic Ranking of World Universities (ARWU) (www.shanghairanking.com/), we already are a global leader. The issue is that with focus, we could achieve much more. (In fact, our current ARWU ranking belies a greater instability in our reputation: we have slipped from a position of 31st in 2003, and we were ranked as low as 43th just last year. US News & World Report ranks us at 44.) CU Boulder has world-wide stature in research and education, but our success has largely been ad hoc not comprehensive. A focused, collective effort will not only benefit the university's principle goals, but can drive CU Boulder forward in the competitive global recruitment environment.

To establish ourselves as a globally engaged campus, we must engage beyond the recruitment of international students or the expansion of study abroad to pursue one or more signature projects. For example, we could create innovative, interdisciplinary opportunities that bring students and faculty together here and at other institutions around the world to solve global problems, such as shrinking water supplies, renewable energy sources or the interconnected problems of climate, health and migration. We could, for instance, bring our expertise in the problems of water in the Western United States—with collaboration from CU Boulder academic and social innovation programs such as Engineering for Developing Communities and related groups such as Engineers Without Borders-USA—into conversation with scholars and communities addressing drought in Africa and elsewhere.

Plan of Action and Recommendations

The Academic Futures Committee identifies the current obstacle to greater progress in this area as a lack of direction. The solution is the assignment of formal leadership.

Our foremost recommendation is that the provost appoint a Vice Provost and Associate Vice Chancellor for Education. This vice provost should be assigned duties specific to developing an international thread to the major recommendations in this report, including but not limited to directing international educational efforts that span graduate and undergraduate education and developing pathways that use technology and education to reach a global audience and support our international students. In making the above recommendation, we recognize that some existing units will have to be reassigned in order to accommodate and to support this central authority.

We see five specific areas the vice provost must engage:

- **Research.** Efforts on international, global research are seen as essential both to the work of individual scholars/artists and to the university's impact and reputation. The university needs to track these efforts and fund them in a strategic manner. Leadership can foster international research.
- **Culture.** As a community, we do not take adequately advantage of or appreciate the daily contributions our international students and faculty make to our community. Leadership can change that culture.
- **Student Success.** While international students are seen as a way to bring diversity to campus and garner new resources, we are concerned that we are not doing enough to support the international students we already have. The committee supports calls for better intercultural connections of students across campus and endorses suggestions made in various white papers to improve the programs designed to support the success of our international students. Leadership can spearhead finding solutions to this problem.
- **Educational Opportunities.** The committee endorses the goal of opening up the world for our students. We urge that the campus explore opportunities ranging from traditional study abroad programs to international research programs to shorter trips abroad around high-impact experiences and service learning. Leadership can help to prioritize global opportunities for our students.
- **Alumni.** CU Boulder has a powerful international base of alumni and supporters—including the chancellor's Global Ambassadors—that we have not effectively engaged in supporting our efforts. Leadership can drive the engagement of our international community in the advancement of our mission.

In conclusion, we return to the most impressive of the many past reports calling for internationalization: the ACE International Laboratory Preliminary Report of 2009. While in need of an update, this report lays out the road map that remains generally accurate. Its recommendations are as follows:

- I. Create a new Associate Vice Chancellor for International Policy and Programs
- II. Increase international student recruitment, enrollment and retention
- III. Create a shared space for international programs on campus
- IV. Increase study abroad participation
- V. Increase the development of globally focused research/creative work, teaching and service that involve collaboration with domestic and international partners
- VI. Internationalize the curriculum for undergraduates
- VII. Expand internationally focused graduate programs and initiatives.
- VIII. Develop comprehensive international partnerships
- IX. Establish new live/work communities

The attached document indicates the progress the campus has made on each of these recommendations, with links to comments in the Academic Futures white papers received from members of our campus community. As that analysis indicates, we have engaged in many efforts around internationalization over the years but have lacked overall focus and impact. As a result, considerable frustration exists on the part of the individuals involved. Rather than restate or rethink the recommendations of the ACE report, the Academic Futures Committee suggests the plan of action and recommendations above as primary mechanisms for directing our efforts, enhancing our focus and accelerating our progress on all fronts.

Rather than restate or rethink the recommendations of the ACE report, the Academic Futures Committee has two key recommendations.

Recommendation: The provost should appoint a Vice Provost and Associate Vice Chancellor for Education, whose other duties are spelled out elsewhere in this report. That vice provost should be assigned duties specific to developing a global campus, including but not limited to directing international educational efforts that span graduate and undergraduate education and developing pathways that use technology and education to reach a global audience and support our international students.

Recommendation: The provost should incentivize international and interdisciplinary problem-based work that addresses some of the world's most pressing problem.

Project 4: Teaching and Technology, Online and Distance Education

Big Idea: Teaching excellence, independent of modality

Goal: Coordinated Use of State-of-the-Art Technology to Create a CU Boulder-Specific Strategy for a Spectrum of Education Modalities from Blended Learning to Online and Distance Education

Concrete First Step:

- Charge the schools and colleges and their faculties and deans with the accountability and academic oversight for all of their online and distance education courses, degrees and certificates offered, as well as for developing a path that leads to enhanced technology use in the classroom.
- Charge the deans of colleges and schools, in partnership with their units, to ensure that enough courses are available online to effectively and flexibly enable students to participate, both as residents and remotely.

Introduction and Context

Digital education, whether distance and online education or the use of technology in the live classroom, emerged early and often throughout Academic Futures conversations and convinced the Academic Affairs Committee that this was a project we must take on. Two truths arose: first, that our students want greater technology-enhanced learning and, second, that many in the faculty desire to experiment with technology across the spectrum of teaching modalities, from the use of various kinds of technology in the live classroom to online and distance education. Overall, our colleagues were clear: the university's efforts with educational technology are currently marked by uncoordinated brilliance; our goal must be coordinated brilliance. This is the goal the Academic Futures Committee endorses.

Our students' assumptions about higher education are fostered by the digital age. They are used to consuming content in short snippets and expect technology not only to work, but to be seamless to use, intuitive and invisibly integrated in the learning process. They demand information immediately and expect that information to be tailored to their needs. They expect flexible schedules and the ability to design their own course of study. They prize mobility but treasure hands-on learning and individual attention—and at the same time, they use technology to create collaborative environments. In recognizing our students' thirst for quick, on demand and easily accessible information, we should not, of course, abandon the key educational goals of providing deeper and disciplined exploration and thinking that moves beyond the gathering of



information, a commodity today, to building knowledge. Still, for us to engage effectively these students, we have to create a flexible learning environment that aligns with our students' values and modes of work: teaching with technology, online and distance learning are not the only ways to reach that goal—as this report's introduction notes, face-to-face education may today be our most radical practice—but they are important ones that require we become more open to integrating technology across our educational practices.

Our faculty has risen to this challenge in many ways. We currently do a great deal with technology and teaching. For example:

- As of Spring 2018, the College of Arts and Sciences offers 224 online classes (20 grad & 204 undergrad); College of Engineering and Applied Science has 217 (30 grad and 187 undergrad)
- We offer the following graduate certificates and degrees that have an online component:
 - Master of Science: 18
 - Master of Arts: 8
 - Master of Engineering: 3
 - Master of Music Education: 1
 - Graduate Certificates: 19
- Total number of graduate online courses: 240
- We offer online degree completion in English, Psychology and Sociology
- Interdisciplinary Studies is offered entirely online with other CU campuses

The Academic Futures Committee wants to recognize the great work already being done by faculty and staff across the campus, but we lack a strategic vision of what we want to do with teaching and technology and how we want to participate in online and distance learning. We also lack centralized leadership and support for these efforts. Our current situation leads to siloed and piecemealed efforts, frustration for people who cannot find the support they need or feel their efforts are being blocked and an incoherent sense of what CU Boulder is doing with technology and teaching, online and distance learning. We must acknowledge that some peer institutions are well established in the online distance education space and trying to compete directly would be difficult. However, CU Boulder has many unique qualities that could differentiate it from others.

The Academic Futures Committee has found a current common vision that generally can be summarized as “supporting teaching excellence, regardless of modality.” This vision claims excellence in teaching across all modalities whether in seminars, lectures, flipped classrooms or online. We must provide faculty and staff agency to teach in the way most effective for them and their students. Various technologically enhanced forms of teaching can improve and expand our offerings to various kinds of students, and they include but are not limited to:

- Flipped classrooms and other blended uses of technology in the classroom can provide interesting and engaging experiences for our residential students.
- Online courses can provide flexibility for residential students who need to take a course that they cannot get into or that conflicts with their schedules. This includes staff members wishing to use their tuition benefit.

- Online degrees can reach students beyond our physical campus boundaries, such as those with family obligations, constricting work schedules or international students, and can potentially be done through platforms such as MOOCs.

As a fully functioning educational ecosystem that embraces and supports the use of technology as appropriate, CU Boulder would be known as a top research university that provides an education grounded in that research no matter where the students or faculty happen to be. This is not using technology for technology's sake, but instead a wise use of new technologies to serve clear pedagogical purposes, course objectives and desired learning outcomes. We want to pursue pedagogical excellence, firmly grounded in research-based best practices and to create flexible academic structures, including stackable credentials, the ability of students to mix and match online and face-to-face classes and industry-based programs. Pioneering adaptations of technology in teaching can help us become a student-centric campus with robust course offerings (certificates, degrees, stand-alone courses) that meet students where they are and meet their needs independent of the modality of pedagogy. Technology is a vehicle helping us to become a dynamic, creative learning community that allows educators to use the right modality for their subject (for both resident and distance students). This approach would allow us support an increase in nontraditional students with associated increases in equity, diversity, accessibility and our global impact. In other words, the appropriate use of technology in our teaching can support other goals explored in this report.

Plan of Action and Recommendations

The campus needs to embrace the appropriate use of technology in teaching, including online and distance education. Our core vision is “teaching excellence, independent of modality.” While no one should be forced to teach in a way that does not suit their skills and abilities, we need to liberate the faculty and staff to pursue technologically enhanced teaching where it fits the needs of students. Thus, the vision needs to be spelled out in Academic Affairs policies that will direct our efforts across the schools and colleges, so that we can clarify what distinguishes CU Boulder’s efforts in the online arena.

Recommendation: Campus leadership should make clear its support of the vision of “teaching excellence, independent of modality” in order to create a flexible and comprehensive infrastructure that supports faculty, staff and students in using technology in our educational mission. Such an infrastructure should be informed by a clear understanding of the broad range of students we serve, both traditional and nontraditional. It should be supported by articulate policies that set out the duties and responsibilities for technology in education and develop clear, research-based expectations and defined metrics regarding academic outcomes, student success, impacts on enrollment and institutional reputation.

Leadership: Our vision is that digital education belongs to the main campus and is an extension of the faculty's educational efforts. Thus, its leadership needs to be housed in Academic Affairs. The provost should appoint a faculty member to oversee the development and implementation of a comprehensive approach to the educational technology spectrum, including hybrid and blended learning and online/distance education. We need leadership from the top to unify our academic thinking, our financial models and our operational approaches to technology in order to achieve transformative change by engaging the entire campus. This individual would pursue the vision of "teaching excellence, independent of modality" and help create a CU Boulder version of technologically enhanced education. Among other tasks that need to be coordinated are marketing, the hiring of technical specialists and needed instructors, the management of admissions issues, collaborations with third-party vendors and the resolution of any issues around state authorization.

Recommendation: The provost should appoint a Vice Provost and Associate Vice Chancellor for Education who would have a specific mandate to provide strategic leadership for technology and teaching, online and distance learning; to pursue international educational efforts (as outlined elsewhere in this report); and to oversee a Teaching and Learning Center (as outlined elsewhere in this report). This vice provost would have responsibility for educational efforts that span undergraduate and graduate education; these efforts should not duplicate or conflict with the work of the Graduate School or the Office of Undergraduate Education and should be coordinated with all the deans.

Provide centralized technical support for these efforts: If we are to be successful in expanding our efforts in these areas of teaching and technology, we need to provide the campus with the technical support it needs. This involves both improved technology in many more classes to increase capacity for distance learning and centralized support for training faculty and producing courses. Needs include instructional designers and curriculum experts, help desk staff and online advisors, as well as data analysts. Technical support in the form of software, hardware and studios are required.

Recommendation: Create a support hub and the necessary physical space, preferably housed in the Center for Teaching and Learning, discussed elsewhere in this report, which will provide the training and support necessary to move forward with technology and teaching, online and distance education. Conversations with the campus should make clear what needs this hub would answer.

Mainstream online teaching: If we are to move forward with online and distance education, these practices must be integrated into the schools and colleges. These practices need to provide clear boundaries of responsibility and be defined in a manner that supports and encourages broader participation to insure proper faculty involvement in these efforts as we

move forward. As indicated above, the schools and colleges will require centralized support services to make this happen.

Recommendation: Charge the schools and colleges and their faculties and deans with accountability and academic oversight of online and distance courses, degrees and certificates offered, as well as for developing a path that leads to enhanced technology use in the classroom. In addition, schools and colleges, in partnership with their units, must ensure that enough courses are available online to effectively and flexibly enable students to participate, both as residents and remotely. These efforts, including the time and energy it takes to migrate courses online and helping units devise appropriate career mentoring/services, should be included as part of faculty and staff normal teaching loads. Faculty and staff must receive the appropriate support to ensure these efforts succeed.

Online Professional Graduate Programs

The Academic Futures Committee recognizes the need to focus on efforts on professional graduate programs that are often offered online. Such programs can supplement our excellent traditional professional graduate degrees. The opportunity for CU Boulder to expand its reach to include nontraditional students and professionals should not be missed. Some of the most innovative teaching occurring on our campus today is happening in our professional certificates, professional masters and other online graduate offerings. Over the last decade, the university has seen substantial growth in the development and delivery of these programs, as ongoing professional training is becoming the norm and thus the need for flexibility for such students is critical. There is increasing demand for such degrees—the bachelor's degree is no longer seen as sufficient for all careers and many people who already have employment need to improve their knowledge and skills. Professional master's degrees also provide a terrific way to stimulate interdisciplinary education. Again, such degrees can meet the needs of those who come to us as transfer students, who seek upper-level and graduate training from CU Boulder after spending a number of years at, say, a community college. With our new approach to awarding bachelor's and master's degrees, such degrees can also allow students the freedom to pursue a liberal arts education with a fifth year Master's providing the career preparation they and their parents often seek. Such degrees can also provide a powerful additional revenue source for the campus.

Because of the nature of the development of these programs over time, we have ended up with a lack of consistency, for example, in terms of student engagement models and funding structures. As a campus, we have made and continue to make progress. For example, in the 2017–18 academic year, the Graduate School worked with stakeholders on procedures for 'stackable' certificates which enable students to pursue professional graduate certificates and stack them into a professional master's program.

Despite these efforts, there is more to be done to create comprehensive approaches to professional programs that are both coordinated and transparent, where fiscal considerations are balanced with the value of connecting our world class faculty to our students, both online and in residence. There is acknowledgment that as a R1 university, we have a responsibility to uphold our intellectual integrity, while providing the greatest flexibility for both our traditional and nontraditional students alike.

Recommendation: The Dean of the Graduate School should convene a cross campus committee to evaluate the current campus approach to the online professional graduate offerings within the entire spectrum of graduate education. The work should include addressing consistency across programs, developing concrete guidelines for all units in supporting these efforts, providing guidance so that units offer appropriate career advising and revisiting current budgeting and cost-sharing structures. The goal of this effort should include establishing policies that incentivize online professional degrees so that they are scalable, sustainable and aligned with accepted metrics of student success.

Project 5: Sustaining, Supporting and Inspiring Our Community

Big Idea: Our strength as a campus lies with our people

The foundation of the success of any of the above initiatives is the support of our campus community. Across the spectrum of faculty, staff and students, there arose remarkable and important ideas of how we do a better job connecting and supporting our community. The Academic Futures process was explicitly designed to draw suggestions from all groups on campus, and the committee has been deeply impressed by the result. There is a collective desire to improve teaching and learning, to extend our strengths in research and creative work and to expand our fine efforts in service and outreach. Everyone wants to see a campus more focused on our students. Colleagues in all groups desire the kind of connection and collective action that can result from interdisciplinarity. There is a shared sense that we must do more to make CU Boulder a more diverse and global campus and to engage more intentionally with technology and teaching. The campus is ready to move forward on the projects the Academic Futures process has endorsed.

Of course, people cannot move into the future if their present makes work or life too stressful or confusing or dispiriting. Following are the Academic Futures Committee's thoughts on some fundamental needs that need to be addressed for the varying groups of staff, students and faculty. There are common challenges we all face on an ongoing basis, as well as challenges unique to individual groups. Here, we first set forth some common issues, and we then offer some thoughts on success for undergraduate students, graduate students/ post-doctoral fellows, staff and faculty.

For All

Underlying many of the concerns raised as part of Academic Futures were a set of challenges our entire campus faces. Some are more readily within the control of the campus, but all should be recognized as barriers our faculty, staff and students face.

Inclusive Culture: As a campus, we are committed to a culture of inclusive excellence, creativity and engagement. Our campus desires a culture of inclusive excellence that explicitly embraces differences and is a welcoming environment for diverse people, experiences and points of view. Key concepts like diversity, inclusion or racial and gender equity cannot just be common phrases; they must be embedded in our culture and our decision making. Inclusion can only be attained by eliminating barriers outlined elsewhere in this document, making this public institution truly open to its campus.

Affordability: Tuition costs, particularly for students but also for staff and faculty dependents, is a growing concern at CU Boulder as it is across the nation. For our students, at all levels, the cost of tuition remains a significant challenge and has particular impacts with regards to accessibility and equity. Tuition is not the only area where affordability comes through Academic Futures conversations. With housing costs skyrocketing in the Boulder-Denver area, everyone struggles to find affordable, convenient homes. The campus needs to work creatively to solve this problem, with possible solutions including blocks of faculty/staff/postdoc/graduate student housing and improved transportation services.

Childcare/Eldercare: CU Boulder should be at the forefront of the nation when it comes to flexible and compassionate work environments. The campus must create an affordable child care and elder care program. We need to provide lactation spaces for nursing mothers across the campus. We need to discuss possibilities for work-hour flexibility for working parents and caregivers.

A Unified Experience, Mentoring and Professional Development: Though the picture of what this looks like varies from students to postdocs to staff to faculty, across the board there is a sense that our community's experience at CU Boulder is highly varied, which can lead to inequities. Everyone has many avenues to navigate to access the information they need, which sometimes creates confusion. We should build upon the Unified Student Experience project to create such support for everyone. As an extension, everyone on our campus should have access to and be recognized for both mentoring and the professional development opportunities that enrich their experience and move them forward on their path.

Common Spaces: At all levels of our community, we lack sufficient space for collaborating, connecting and sharing. We should make sure that all new buildings include community spaces. We should explore the possibility of creating a new University Club.

Breaking Down the Silos and Open Communication: Everyone on campus desires more connections—between students and mentors from the faculty and staff, between academic departments, between administrative units, between faculty and staff. Interdisciplinarity is one avenue to create such connections, but we must have a larger goal of building links within our community to improve our work and to inspire our members. Communication between the administration and the rest of the campus must be improved.

For Our Undergraduate Students

Student success has been a core goal set for the campus by the chancellor for a number of years; it is still embodied in his three strategic initiatives. Foundations of Excellence, Inclusive Excellence, Enrollment Management and many more efforts on campus are all important contributions to ensuring our students succeed. The Academic Future's first project is focused on creating a student-centered campus and thus on student success. Almost everything in this report can be seen as building a better teaching and learning environment. Rather than repeat all the good ideas in other processes and other portions of this report, we note a few important collective efforts we must undertake for our undergraduates.

Teaching Excellence: Our faculty and staff are dedicated to providing our students with the best possible opportunities to learn. We have a variety of professional development programs to aid faculty in improving their teaching skills. We have a range of exciting new projects, including First Year Seminars and the entire Foundations of Excellence effort, to offer students new avenues within their college education. To support our students, we must make sure we are providing the faculty with the time and training to develop creative new approaches to teaching and learning. The proposed Center for Teaching and Learning could coordinate such efforts.

Impactful Educational Experiences: There is a clear desire to provide our students with a range of “high-touch,” innovative educational opportunities that range from small classes in critical thinking and communication to online offerings. To provide such courses—courses in critical thinking and communication, courses involving service learning, courses that have hands-on learning and/or authentic research experiences and capstone courses—we must marshal significant resources and the time and creativity commitment of faculty and staff to build and deliver these experiences. We will not transform education at CU Boulder unless we make this a priority for our investments.

Advising Excellence for All Students: We must have a comprehensive and coordinated approach to advising that ensures that students are supported throughout their careers at CU Boulder.

The Whole Student: Academic Futures has, by definition, focused on the academic side of CU Boulder. The Academic Futures Committee recognizes that we must recognize our students as whole, complex, diverse human beings. The Academic Futures Committee applauds the work done by Student Affairs, by ODECE, by advisors and by many others to serve all of the needs of our students.

For Our Graduate Students and Post-Doctoral Fellows

Graduate Students and Post-Doctoral Fellows occupy unique positions on campus. They are simultaneously being taught or mentored by the faculty and serving the campus as teachers and researchers; they are both being developed as future members of the profession or for other career paths, and they are working for us now. The campus has particular obligations to both these groups. Our work depends upon them. Our reputation rests in part on the success of our graduate students and post-doctoral fellows. We need to make sure that we provide adequate support for these students and fellows and offer them the proper professional development. Our success depends upon their success. We must recognize and support their development as full-fledged members of our academic community by providing a universally inclusive experience and working environment where resources are sufficient to support their success. While the recommendations below reflect primarily discussions revolving around graduate student success, we recognize that post-docs have many of the same needs.

The Academic Futures Committee endorses the following vision of what the campus should offer our graduate students:

- A universal, inclusive academic experience where all graduate students feel welcome, appreciated and engaged as full-fledged members of the CU Boulder community.
- A working environment for graduate students where resources are sufficient to allow graduate students to focus on their academic/professional/research work and development.
- A flexible training platform that allows graduate students to prepare according to their own plans and professional/academic needs.

We note that a wide variety of efforts to improve graduate students' experiences are already underway across campus. We applaud the recent efforts, for example, of the Graduate School and the campus as a whole to increase graduate student stipends. We note more local efforts to improve graduate student support, such as the Center for Humanities and the Arts' Consortium for students in the languages and literatures. Our recommendations seek to expand on these existing efforts by changing structures and practices and requesting additional resources.

Financial Support: The campus should consider increasing financial support for students and their research (including stipends, housing, child care, dedicated graduate student space, summer funding and research and writing support). Beyond increasing financial support, the university should restructure its funding of graduate students (e.g., TA support and fellowship funds) to ensure that the funding models reflect graduate programs and their needs as they exist today and to guarantee minimum standards for space and funding for all graduate students. This priority far outstrips the others.

Support Services, Professional Engagement and Mentoring for the Academy and Beyond: The campus must provide the appropriate support and mentoring for graduate students who wish to shape the future professoriate, but this is no longer a sufficient

description of our efforts in graduate education as we prepare students for careers outside academia. The university needs to promote and support interactions between graduate students and faculty and researchers beyond their home units. These initiatives could draw from successful existing graduate and undergraduate programs or create new structures that prepare our students for a changing academic and working environment. There may be opportunities to create specific minors and certificates for graduate students; for example, Leeds will be offering a business minor for graduate students or the Center for Humanities and the Arts' consortium could offer a certificate in current literary critical practices. We need a central hub for non-academic advising and placement.

We also need to improve various aspects of the graduate student experience:

Community-building Opportunities and Social Climate: Attention needs to be paid to reducing bias; increasing inclusiveness in our student body, faculty and curricula; and enhancing resources (including money, space and communication options) available for community building.

Professional Socialization/Career Readiness: Students and others note that preparation for a wider variety of careers within and outside academia needs to be integrated more systematically into the graduate student experience at CU Boulder, both within their units and at interdisciplinary and campus levels. Since communicating opportunities to students is recognized as a major problem on campus, more widespread and effective modes of communication should be established.

Mentoring Resources and Structures for Graduate Students: A standard for mentoring graduate students needs to be established for the entire campus. Mentoring needs of graduate students are changing and require new mentoring practices. For example, students need to be prepared for careers outside academia as well as academic options. Many ongoing efforts on campus should be systematized and given additional resources. Faculty and staff mentors should also have access to a wide variety of training options in mentoring through a new Teaching and Learning Center or another campus entity.

Mental Health: The campus must expand psychological counseling services for individuals and groups.

Graduate students have the support of their departments and of the Graduate School. The Academic Futures Committee is pleased to note that the Research and Innovation Office has recently created a community of support for post-doctoral fellows, as they have reached out to post-docs and those who work with them. Still, post-doctoral fellows often feel as if they sit in a kind of limbo—not still students, not yet faculty. We need to continue to improve our services for

them. Each of the five recommendations described above is also key for improving postdocs' success on our campus. Some efforts can help graduate students and postdocs alike (e.g., offering training in mentoring to faculty, career readiness training, child care), while others may need to be addressed separately for graduate students and postdocs (e.g., funding opportunities, community building). While acknowledging that the experiences of graduate students and postdocs are not the same, we recommend that both groups be attended to as these recommendations are implemented.

For Our Staff

As we work to ensure our students' success and as we extend our excellence in research, scholarship and creative work, we need also to focus on staff success. We need to reaffirm the importance of our staff to the university's mission and support them. Our staff want to participate more fully in the work of academic departments, as well as administrative units. They want to support the chancellor's strategic initiatives, for example, to aid student success by offering seminars for incoming freshman in such issues as time management or managing money; being more fully engaged in innovative research, scholarship and creative work; and being encouraged to do more service to the campus, to the community and to professions. Our staff are dedicated members of the university community who want to pursue careers on our campus.

Staff should have full participation in the campus's interdisciplinary and interdepartmental efforts. Staff share with the faculty a frustration over efforts that are diffused and disaggregated. First, we should make ensure opportunities exist to provide connections of staff members with other staff members, faculty and students across departments, so as to create ways to cross-pollinate ideas and produce innovative projects. Secondly, staff should be recognized as part of the communities that build interdisciplinary efforts, whether in the laboratory or in the studio. Third, staff must have a stronger connection to the mission of the university by understanding the connection between their daily work and the chancellor's strategic initiatives of shaping tomorrow's leaders, being a top university for innovation and positively impacting humanity (also known as: Lead. Innovate. Impact.). Perhaps more fundamentally, staff need to understand how they fit into various campus communities. We have one mission: to create new knowledge and forms of expression and to provide that knowledge and art to our students and the other publics we serve. Everything we do should serve that mission, and our staff's success is essential to our overall success.

Foundational needs exist that the campus must address if we are to continue to recruit and retain an excellent and inclusive community of colleagues. Important additions to our system of support, including the recent expansion of parental leave, has helped but much more remains to be done. While many of these issues overlap with the concerns of students and faculty—

including childcare/eldercare and housing costs—and therefore are included in the Community Overview Section, there are several areas that are unique to staff.

Unified staff experience: Like students, staff have many avenues to navigate to find information they need. Build on the Unified Student Experience project to create such support for staff.

Staff Development and Growth: Our staff are dedicated members of the university community who want to pursue and advance their careers on our campus. We must provide the services and support needed for staff development, growth and opportunity. Greater accessibility to the tuition benefit, currently used by fewer than 5 percent of our staff, is a cornerstone to this effort. A partnership with other institutions of higher education including Front Range Community College or providing more online classes will offer the flexibility needed by staff to allow them to pursue course work. Encouraging staff to pursue leadership opportunities such as Staff Council is vital to the growth of our staff. More broadly, the university should expand upon the good work already being done to provide career development programs and career mobility for staff, including for mid-level managers.

Service: Staff should be encouraged and rewarded for engaging in service at all levels of the campus and beyond, such as departmental service, Staff Council, broader campus engagement and community outreach.

Breaking Down Silos Through Interdepartmental Efforts: Just as students and faculty want interdisciplinary opportunities and inter-unit connections, so do staff want to have ways to link so as to cross-pollinate ideas and produce innovative ideas.

For Our Faculty

The university makes an optimistic, long-term investment when it first recruits each tenure-track faculty member. It is critical to carefully start our recruitment processes with inclusive hiring practices. We also need to ensure that we hire faculty who are prepared to immerse themselves in the specific mission of University of Colorado Boulder and to embrace our expectations of teaching, scholarship, service, mentorship, diversity and willingness to engage in long-term growth. While we will continue to hire excellent scholars and educators, our faculty will be required increasingly to provide mentorship and function as guides to CU Boulder's undergraduate body, graduate students, staff and faculty peers. Thus, we need to ensure that we purposefully hire, train and sustain faculty who possess such skills and value mentorship. We must hire the whole person—someone who will learn to teach well, to serve and lead with skill and to do first-rate research, scholarship and/or creative work. In addition, as we hire and retain faculty, we must make sure we have clear policies and practices for start-ups, space requests and retention packages.

The Academic Futures Committee recognizes the vital contributions of the various faculty groups on campus, as the tenure track faculty push forward the research, teaching and service mission of the campus, as our research faculty make huge contributions to the scholarly work of the university, and as instructors/senior instructors/teaching professors, along with clinical faculty members and other groups, represent some of our strongest pedagogical efforts. The Academic Futures Committee affirms the centrality of instructor-rank faculty and research faculty—who, in conjunction with the tenure and tenure-track faculty comprise the “regular faculty”—in the educational and research mission of the campus.

Recruitment and Retention: Inclusive excellence must guide our faculty hiring and development process. Resources must be available for the identification, recruitment, training, support and retention of a diverse faculty body. This includes enhancing support for housing assistance, dual-hires and benefits such as access to day care and reduced tuition for dependents.

Units should also be encouraged to develop appropriate mentoring programs for faculty whose duties include teaching, service and research, following specific guidelines that are uniform across campus. As stated elsewhere in this report, a Teaching and Learning Center should be created which will have the resources and expertise to, for example, enhance teaching as a scholarly activity and to promote teaching excellence.

Regularly perform salary reviews (e.g., every 2 years) at the school, college or department level to assess salary inequalities that could impact all faculty. These reviews should be enforced at the campus level. There must be a clear plan to deal with inequalities, in consultation with the faculty member. Ensure that annual merit review processes provide appropriate rewards for efforts in teaching, research and service. Create standardized pay increases for promotions to associate professor, professor, senior instructor and teaching professor.

Promotion and Tenure Review: Future promotion and tenure review should require a clear definition of what “Excellence in Teaching” means. It is also time to update review criteria to include some measure of “impact.” Impact includes not just high-impact journals and well-reviewed books, but importantly can address solution-based approaches to complex problems. For example, “impact” can include outcomes and programs or training that improve the social and economic status of communities. Impact can also include, national level recognition, attention in conventional and social media, etc.

Research Faculty and Instructors: Recognize the significant contributions that

instructors and research faculty make in the advancement of teaching and scholarship on the CU Boulder campus, and revisit campus policies in regard to the way in which instructors and research faculty are incorporated into the overall campus community. There needs to be a discussion about offering instructors and researchers the opportunity for additional professional development within their fields, if they so desire. In addition, we must improve the language in the contracts for instructors which do not match our values as an institution that treats employees with respect.

IV. Governance

Faculty Governance

The University of Colorado Boulder operates under shared governance in which the faculty works in conjunction with academic and non-academic administrators to guide the campus forward. The Academic Futures Committee wants to acknowledge the fine work done by various faculty (and staff and student) governance groups in recent years as they have successfully argued for their constituents. However, with the growth of the administration, and particularly of non-academic administrative groups, many faculty members have come to feel that the faculty is no longer in control of the academic work of the campus. While the Regents have spelled out areas of faculty responsibility, such as the curriculum, the nature of shared governance between the faculty and the administration is not always clear. The Academic Futures Committee recognizes and affirms the clear desire for a stronger and more clearly defined governance structure; we must understand which issues should require faculty approval (and how that is sought) and which issues simply require faculty consultation.

The current situation is marked by a number of challenges:

- Communication between the administration and faculty, as well as between faculty governance groups and the campus, needs improvement.
- Many Faculty believe that governance has weakened in recent years.
- Many on the faculty feel that faculty governance bodies are ineffective, and they are thus unwilling to participate.

Faculty governance also means different things to different individuals. For some, faculty governance means formal advisory bodies designed, in essence, to speak to various levels of administration so that, for example, there is an Arts and Science Council that has a formal role in advising the Dean of Arts and Sciences (the other schools and colleges have varying structures in place), the Boulder Faculty Assembly works with the provost and the chancellor, and Faculty Council speaks to the President and the Board of Regents at the system level. We heard some concerns that these bodies overlap and perhaps even conflict with one another: for example, what do we do when BFA disagrees with Faculty Council? On this campus, in one sense, academic policy is made in a collaborative way, with various administrative bodies bringing proposals before the BFA and the Council of Deans, but many decisions are made outside these bodies. In many situations this process takes time, whereas some decisions need to be made quickly. How do we continue to include Faculty in governance while still getting decisions made in a reasonable time?

For others, faculty governance occurs not in these bodies but in the work of department chairs and key faculty committees. Department and Division chairs are seen as key actors in shared

governance, as they are both representatives of the faculty and appointees of the deans; many see chairs as an under-utilized resource on campus. There are also a set of campus-level committees that do in fact share in the governance of the campus. The Vice Chancellor's Advisory Committee (VCAC), made up completely of faculty, has very rarely been overturned by the provost or chancellor; in advising on personnel issues, VCAC determines the community of faculty at CU Boulder. The Academic Affairs Budget Advisory Committee (AABAC) has at times had a direct role in shaping budget decisions, while the Academic Review and Planning Advisory Committee (ARPAC) oversees an evaluation and planning process and writes a final planning report that is accepted, typically with very minor revisions, by the deans and the provost. The Graduate School and the Office of Undergraduate Education have faculty committees to oversee the curriculum and teaching and learning at their respective levels. These committees do work with the appropriate administrators, but year in and year out they are making decisions that shape the future of the campus.

A lack of clarity about where faculty governance resides leads to various “urban myths” about decision making (i.e., the Council of Deans runs the campus, all decisions are actually made in the budget office, etc.). There is perhaps even greater uncertainty about staff contributions to governance, with Staff Council being the most visible representative of the staff on campus. Weak communication contributes to the problem, with the Provost's Faculty Communication Committee seeking to resolve that particular issue (<https://www.colorado.edu/provosts-faculty-communication-committee-pfcc>)

The Academic Futures Committee recognizes that universities everywhere have changed ever more rapidly in recent years. The growth of all aspects of our campus—more students, larger and stronger research efforts, increasing size of administrative duties and bodies—has rendered it impossible to run the university in any sort of all-inclusive, collectively democratic way. The faculty finds its time ever more taken up with compliance issues, which may be unavoidable, but also with internal bureaucratic procedures that certainly could be eased. What we need is a system of shared governance in which the faculty has sufficient confidence in the guiding decisions and policies being made that they can then rely upon administrative groups to enact those decisions and policies.

For most faculty members, governance issues arise at three levels: the department or division, the school or college and the campus. At each level, there is shared governance between the faculty as a whole that make up that community and one or more administrators, from chairs to the provost. Different faculty members are engaged to differing degrees at each of these levels; their voices need to be heard where appropriate and their efforts need to be recognized.

Departments and divisions are responsible for their own bylaws and procedures:

Recommendation: Each department and division should review its bylaws thoroughly, no later than the unit's next program review, in order to make sure the governance structure reflects the culture of the unit and current college, campus and system policies. Attention must be paid to the appropriate rights and participation of all members of the department, including instructors, research faculty, staff, graduate students and undergraduate students.

Faculty governance varies dramatically from school to college.

Recommendation: Each of the deans should engage their faculty in designing the appropriate governance structure for their school or college. Every school or college should have a governance body recognized by the faculty as representing their interests, ideas and concerns.

Campus-wide governance

The provost currently must deal with a hodge-podge of decision making groups not to mention individuals who report to the provost or seek access. The provost should consider a clearer model for gathering ideas and making decisions. There are many possible models, including one in which the provost meets a series of councils: the current Council of Deans, the BFA, a Council of Chairs and a Provost's Council, made up of the vice provosts and vice chancellors who report to the provost. The provost would consult extensively with the appropriate council on matters of concern to the campus.

A simpler and perhaps stronger model would establish the provost as, in essence, the president of the campus, with the Council of Deans serving as a sort of campus senate and the BFA as a campus house of representatives. A clear campus process would need to be established to determine which matters needed to be brought by the "executive branch" to the two "legislative branches."

The Academic Futures Committee recognizes that for such a structure to work that 1) stronger trust would need to be built between the faculty as a whole and the provost and the Office of Academic Affairs and 2) the BFA would need to be strengthened so as to earn the respect of the full faculty. As mentioned above, the Provost's Faculty Communication Committee has recommendations to work on the first issues. Suggestions for strengthening the BFA ranged from offering compensation for serving on the BFA to making membership on the BFA made by lottery so that faculty would be randomly selected to serve and, unless they were on leave, they would be required to serve. The Academic Futures Committee believes that if the BFA was given clear "legislative" authority, its own authority would immediately be improved.

What we must do is imagine a faculty governance structure that works for the future of the university. It cannot be the case that the faculty as a whole is involved in making decisions about every aspect of the complex institution that is CU Boulder, but the faculty must have the confidence that it is shaping the key guiding decisions that are being made for the future of the campus:

Recommendation: The provost and the faculty should convene a task force to create a shared campus-level governance structure that involves the faculty in core decisions while allowing the administration the freedom to carry out those decisions. As a public research university devoted to instilling democratic ideals in our students, we should embody those ideals in our practices.

V. Campus Success: Physical and Financial Resources

The first phase of the Academic Futures process was described as the “what phase”—what do we want to do—rather than the “how phase”—how do we accomplish the goals we select. While there have been necessary moments when this report has had to make concrete recommendations about how to move forward, the Academic Futures Committee has for the most part stepped back from talking about means of implementation—particularly when the committee lacked the necessary expertise on some topic.

The Academic Futures Committee notes that there are other processes in place that will move forward conversations on such subjects as budget, space and infrastructure. For example, the campus has announced a “Financial Futures” project (<https://www.colorado.edu/today/2018/08/14/financial-futures-aligns-financial-resources-mission>). The Academic Futures Committee commends this effort, which promises to help align our resources with our mission, including the ideas embedded in this report. The Academic Futures process did not allow for the detailed conversations about budgeting that Financial Futures will undertake, but the committee does have some issues it believes should be considered in this new conversation:

- It may seem to go without saying, but we should always remember that the budget is a tool for accomplishing our mission as a public institution of higher education. We are not a business. All budget decisions should be measured by how they serve our core missions of teaching and discovery.
- The Academic Futures Committee urges the campus to rededicate itself to our mission as a public research university and that includes pursuing additional state financial support for higher education.
- There is a wide-spread conviction on campus that current budget models, at least as they are implemented at the local level, prevent us from doing many of the things we wish to do. For example, departments told to track student credit hours in order to gain budget are unlikely to assign faculty to small first-year seminars or allow them to team-teach. We must design a budget model that flexibly enables and supports the creative efforts of the campus.
- Resources—even resources on the margin—should not be allocated solely on the basis of student credit hour generation. We need to be able to consider how, for example, research and creative work serve our strategic imperatives of innovation and impact and we need to think about how service, leadership and outreach promote our impact on humanity.
- The process for making major budget decisions—not the management of the budget day-by-day—must be transparent to the campus and the faculty’s role in making such decisions must be specified.

The Academic Futures Committee has a smaller number of more specific ideas to consider:

- The Academic Futures Committee believes that serious consideration should be given to budgeting all academic courses and programs devoted to the first-year experience through the provost's office. Serving our first-year students should be a common cause with a common budget.
- The projects set forth by Academic futures, as well as other strategic efforts currently underway on campus, will require significant resources. An outcome of the Financial Futures project should be an investment pool, controlled by the provost and funded by all units on campus. This pool represents a commitment by the entire campus to our collective future.

The Academic Futures Committee also notes that a Strategic Facilities Visioning process is underway that will lead to our decadal master plan

(<https://www.colorado.edu/today/2018/05/02/creating-strategic-facilities-vision-campus>). The Academic Futures Committee is interested in this effort, which promises to help align our development of facilities with our mission, including the ideas included in this report. The Academic Futures process did not allow for the detailed conversations about budgeting that this visioning process will undertake, but the committee does have some issues it believes should be considered in this new conversation:

- The campus must create an affordable child care and elder care program. This does not necessarily entail a building on campus.
- There is a great desire for more communal space, including a University Club that could serve to build community.
- All new buildings should include appropriate communal spaces, including open space, cafes and outdoor seating that serves both the specific user group of the building and also the larger campus.
- New buildings should be designed with an eye to interdisciplinary efforts.
- Classrooms need to provide appropriate technology.
- Our sense of our physical campus must include spaces for international students and scholars and think about our reach beyond the campus to the world
- Housing issues for staff, graduate students and faculty must be addressed with both near-term and long-term solutions

The Academic Futures Committee heard in more detail about the future of our analytical facilities. CU Boulder deeply invests in the development of analytical capabilities in laboratories within our institutes, the College of Arts and Sciences and the College of Engineering and Applied Science and elsewhere. This instrumentation is purchased for multiple purposes, often

to support individual investigators or to enhance departmental programs. One-time funding is also provided to establish state-of-the-art analytical capabilities required by a large swath of the community (i.e., campus facility that serves users across many disciplines), often through providing matching funds for large instrumentation grants funded by government agencies and private foundations. The resulting campus core facilities then meet numerous specific research needs, while also serving as a nexus for interdepartmental engagement and collaboration. As we look to the future, we recommend the more purposeful development of campus spaces and analytical facilities within “Campus Core Facilities” designed around thematic research and educational needs and experiences.

VI. Conclusion

Academic Futures offers the entire campus a once-in-a-generation opportunity to think about who we are and where we want to be in the coming decades. Higher education must, now more than ever, to be able to speak to our national and global needs, while preserving and growing the core of our intellectual spirit. Thanks to the conversations that began more than a year ago with every corner of campus, we have been able to create both a vision of that future and a path to growing our spirit. We look forward to hearing your thoughts.

VII. References – To be added during September